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/ncce="Occasion: mixed (see below); Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI: Equal amounts of plaamid DNA from three normalized libraries (melanocyte 2NbHM, pregnant uterus NbHPU, and fetal heart NbHH19W) were mixed, and ss circles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from pools of 5,000 clones made from the same 3 libraries. The pools consisted of I.M.A.G.E. clones 260232-265223, 340488-345479, and 484488-489479."
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1 (bases 1 to 600)

Harrington,J.J., Sherf,B., Rundlett,S., Jackson,P.D., Perry,R., Cain,S., Leventhal,C., Thornton,M., Ramachandran,R., Whittington,J., Lerner,L., Costanzo,D., McElligott,K., Boozer,S., Mays,R., Smith,J., Danzig,J. and Ducar,M.

E., Veloso,N., Klika,A., Hess,J., Cothren,K., Lo,K., Offenbacher,J., Danzig,J. and Ducar,M.

Creation of genome-wide protein expression libraries using random activation of gene expression.
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21.9%; Score 107; DB 9; Length 509
Best Local Similarity 99.4%; Pred. No. 6.4e-44;
Matches 157; Conservative 0; Mismatches 1; Indels
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3201 Carnegie Ave, Cleveland, OH 44115, USA
Tel: 216 431 9900
Exa: 216 531 9596
Email: scain@athersys.com
High quality sequence stop: 444.
Location/Qualifiers
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Contact: Scott J. Cain
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vector. Library was normalized. Library was constructed by
Life Technologies. Contact : Feng Liang Life Technologies,
a division of Invitrogen 9800 Medical Center Drive
Rockville, Maryland 20850, USA Fax : (1) 301 610 8371
Email : fliang@lifetech.com URL :
http://fullength.invitrogen.com"
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AL548180.1 GI:12882943
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/note="See 'Creation of Genome-wide Protein Expression Libraries using Random Activation of Gene Expression', Nature Biotechnology, in press. Note that even though the cell type indicated is HT1080, since a random activation method was used, these sequence tags are not necessarily expressed in HT1080 under normal circumstances."
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Bukaryotas, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Pred. No. 6.2e-44;
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/organism="Homo sapiens"
/db_xref="taxon:9666"
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/dev_stage="Adult"
/note="Organ: uterus; Vector: pucl8; Site_1: Sma1; Site_2: Sma1; A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196
/716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA amd cDNA amplification were performed under low stringency conditions."
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1 (bases 1 to 483)
Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R., Goldman,G.H., Carvalho,A.F., Magai,M.A., Bordin,S., Costa,F.F., Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H., Brunstein,A., deoliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=&t2=PM4-UM0088-050 400-001-cll&t3=200-04-05&t4=1)
Seq primer: puc 18 forward
High quality sequence stop: 483.
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Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \operatorname{Simpson}, \operatorname{A.J.} Shotgun sequencing of the human transcriptome with ORF expressed
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ilarity 100.0%; Pred. No. 5.7e-26;
Conservative 0; Mismatches 0;
                                                                               187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
                                                                                                         Email: asimpson@ludwiq.org.br
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Fax: +55-11-2707001
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AW804168/c DEFINITION

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REFERENCE AUTHORS MEDLINE COMMENT

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ACCESSION VERSION KEYWORDS

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CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: Greg Lennon, Ph.D.
DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: NCI-GGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
Insert Length: 3944 Std Error: 0.00
Seq primer: -40UP from Gibco
High quality sequence stop: 410.
Location/Qualifiers
       A1860008 637 bp mRNA 11near EST 07-MAR-2000 wm22g03.xl NCI_CGAP_Ut4 Homo sapiens cDNA clone IMAGE:2436724 3' similar to SW:IL15_HUMAN P40933 INTERLEUKIN-15 PRECURSOR ;, mRNA
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Stlte_2: Notl; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.48 kb. Life Technologies catalog #:
11542-016"
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1 (basea 1 to 637)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
NATIONAL Cancer Institute, Cancer Genome Anatomy Project (CGAP); Tumor Gene Index
Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-rémail.nih.gov
Tissue Procurement: Christophèr Moskaluk, M.D., Ph.D., Michael R.
Emmert-Buck, M.D., Ph.D.
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Mammalia; Eutheria; Primates; Catarrhini; Hoi
1 (bases 1 to 994)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
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Live 0; Mismatches
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Fax: +55-11-2707001
Email: ssimpson@ludwig.org.br
Project. This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=&t2=PM4-UM0088-050 Seq primer: puc 18 forward
High quality sequence stop: 494.
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PM4-UM0088-050400-001-d12 UM0088 Homo sapiens cDNA, mRNA sequence.
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Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
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/dev_stage="Adult"
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BASE COUNT ORIGIN

FEATURES

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900-385-904&t3=2000-09-06&t4=1)
Seq primer: puc 18 forward
High quality sequence start: 52
High quality sequence stop: 301.
Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                              63; Conservative
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BI758686
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                                                                                                                       BF088290 301 bp mRNA linear EST 19-OCT-2000 CM1-HT0875-060900-385-904 HT0875 Homo sapiens CDNA, mRNA sequence. BF088290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases I to 301) blas Neto. E. Garcia Correa, R., Verjovski-Almeida, S., Briones, M.R., Goldman, G.H., Carvalho, A.F., Matsukuma, A., Baia, G.S., Simpson, D.H., M.J., Soares, F., Brentani, R., Reis, L.F., de Souza, S.J. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=&t2=CMl-HT0875-060
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Shotgun sequencing of the human transcriptome with ORF expressed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                     Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Email: segref@genoscope.cns.fr, Web : www.genoscope.cns.fr.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
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                                                                                                                                                                                                                                                                                                                                                                                                                             Length 994;
                                                                                                                                                                                                                                                                                                                                                                                                                            14.7%; Score 72; DB 9; Length 994
100.0%; Pred. No. 5.4e-26;
Live 0; Mismatches 0; Indels
         Full-length cDNA libraries and normalization
Unpublished (2001)
Contact: Genoscope
                                                                                                    Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       +55-11-2704922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fax: +55-11-2707001
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Best Local Similarity 100.0

"...hes 72; Conservative
                                                                                                                    1. 994
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/db_xref="taxon:966"
/db_xref="taxon:966"
/clone_lib="Hr0875"
/dev_stage="Addut"
/note="Organ: head_neck; Vector: puc18; Site_1: SmaI;
Site_2: SmaI; A mini-library was made by cloning products
Site_2: SmaI; A mini-library was made by cloning products
derived from ORSTES PCR (U.S. Letters Patent application
No. 196,716 - Ludwig Institute for Cancer Research)
profiles into the pUC 18 vector. Reverse transcription of
tissue mRNA and cDNA amplification were performed under
low stringency conditions."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     63304240F1 NIH_MGC_114 Homo sapiens cDNA clone IMAGE:5194977 5', BI758686
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chordata; Craniata; Vertebrata; Euteleostomi;
Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Theyer Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov.o.column: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleoston Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. (Acases 1 to 872)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC) (Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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Tissue Procurement: Life Technologies, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                          12.9%; Score 63; DB 10; 100.0%; Pred. No. 2.4e-21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Prea. ....
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/db_xref="taxon:9606"
/clone="IMAGE:5194977"
/clone_lib="NIH_MGC_114"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  High quality sequence start: 24
High quality sequence stop: 859.
Location/Qualifiers
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1 (bases 1 to 474)

28 Hillier,L., Clark,N., Dubuque,T., Elliston,K., Hawkins,M., Holman,M., Hultman,M., Kucaba,T., Le,M., Tan,F., Marra,M., Parsons,J., Rifkin,L., Rohlifing,T., Soares,M., Tan,F., Trevaskis,E., Waterston,R., Williamson,A., Wohldmann,P. and Wilson,R.

The WashU-Merck EST Project
Unpublished (1995)
Contact: Wilson RK
WashIngton University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Fax: 314 286 1810
upon cloning). Average insert size 1.5 kb, insert size range 1-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 019. Note: this is a NIH_MGC Library."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N49734 14-FEB-1996 YZ06b12.s1 Soares_multiple_sclerosis_2NbHMSP Homo sapiens cDNA clone IMAGE:282239 3' similar to SW:IL15_HUMAN P40933 INTIREBUKIN-15 PRECURSOR ;, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /tissue_type="multiple sclerosis lesions"
/dev_stage="Age 46"
/dev_stage="Age 46"
/dev_stage="Age 46"
/dev_stage="Age 46"
/dev_stage="Age 46"
/note="Vector: pT7130 (Pharmacia) with a modified
polylinker V_TYPE: phagemid; Site_1: Not I; Site_2: Eco RI
: ist strand cDNA was primed with a Not I - oligo(dT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          double-stranded cDNA was size selected, ligated to Eco RI adapters (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of a modified pTyT3 vector (Pharmacia). Library went through one round of normalization to a Cot = 5. Library constructed by Bento
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       through LLNL; contact the ') for further information.
                                                                                                                                                                                                                                                                                                          67 AGTCATITICTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
                                                                                                                                                                                                                                                                                                                                        Gaps
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/db_xref="CDB:3900767"
/db_xref="taxon:9606"
/clone="IMAGE:282239"
/clone_lib="Soares_multiple_sclerosis_2NbHMSP"
/sex="male"
                                                                                                                                                                                                                        Length 872;
                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Email: est@watson.wustl.edu
This clone is available royalty-free through
IMAGE Consortium (info@image.llnl.gov) for i
Seg primer: ml3 -40 forward
High quality sequence stop: 263.
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O
                                                                                                                                                                                                                   Score 62; DB 10; Pred. No. 7.3e-21;
                                                                                                                                                                                                 12.7%; Scor.
100.0%; Pred. No. ...
0; Mismatches
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Location/Qualiflers
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N49734/C
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primer [5, Total Control of the cont
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      RNA from 4 multiple sclerosis
kindly provided by Dr. Kevin
                                                                                                                                                                                                                                                                               ö
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/dev_stage="Age 46"
/dev_bost="PH10B (ampicillin resistant)"
/note="Vector: pr773D (Pharmacia) with a modified
polylinker V_TYPE: phagemid; Site_1: Not I; Site_2: Ec
                                                                                                                                                                                                                                                                                  Gaps
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/clone="IMAGE:289606"
/clone_lib="Soares_multiple_sclerosis_2NbHMSP"
/sex="male"
                                                                                                                                                                                                            Length 474;
                                                                                              5 others
                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                         11.2%; Score 55; DB 10; L 100.0%; Pred. No. 3e-17; ive 0; Mismatches 0;
Soares and M.Fatima Bonaldo.
lesions from one patient was
G. Becker (NINDS/NIH). 1.1
81 C 67 9 161 t
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N76741.1 GI:1239319
                                                                                                                                                                                         Query Match
Best Local Similarity 100.0
Matches 55; Conservative
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Query Match

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BI832895

ACCESSION VERSION

ORGANISM

KEYWORDS SOURCE

REFERENCE AUTHORS TITLE JOURNAL COMMENT

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1. .278
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//Organism="Homo sapiens"
//Organism="Homo sapiens"
//Organism="Homo sapiens"
//Organism= Adult"
//Organism= Adult"
//Organism= Adult"
//Organism= Adult"
//Organism= Adult
//Orga
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Bukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo. Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. Lobases 1 to 278)

Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R., Nagai,M.A., da Sllvay,W. Jr., Zago,M.A., Bordin,S., Costa,F.F., Nagai,M.A., da Sllvay,W. Jr., Zago,M.A., Baia,G.S., Slmpson,D.H., Brunstein,A., deolivelra,P.S., Bucher,P., Jongeneel,C.V., O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.
1 (bases 1 to 718)
NIH-MGC http://mgc.ncl.nih.gov/.
NIH-MGC http://mgc.ncl.nih.gov/.
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
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Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                                                                                                                                                                                                                               \operatorname{Simpson}, A . J. Shotgun sequencing of the human transcriptome with ORF expressed
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9.8%; Score 48; DB 9; Length 278;
Best Local Similarity 100.0%; Pred. No. 1.2e-13;
Matches 48; Conservative 0; Mismatches 0; Indels
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50 c 54 g 98 t
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BI766231.1 GI:15757809
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Fax: +55-11-2707001
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pCMV-SPORT6; Site_1: Not1; Site_2: EcoRV (destroyed); RNA
source anonymous pool of spleen and pancreas from 28 yo
male. Library is oligo-dT primed and directionally cloned
(EcoRV site is destroyed upon cloning). Average insert
size 1:5 kb, insert size range 1-2.5 kb. Library is
normalized and enriched for full-length clones and was
constructed by C. Gruber (Invitrogen). Research Genetics
tracking code 0.05: Note: this is a NIH_MGC Library."

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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
clone distribution: McC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM11557 row: k column: 20
High quality sequence stop: 756.
Location/oualifiers
1. 756
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NIH-MGC http://mgc.nci.nih.gov/.
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Enall: cgapbs-r@mall.nih.gov
Tissue Procurement: Life Technologies, Inc.
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/db_xref="taxon:9606"
/clone="IMAGE:5221771"
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/lab_host="DH10B"
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FEATURES

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ILZ-UT0071-050900-144-B03 UT0071 Homo sapiens CDNA, mRNA sequence.
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1 (bases I to 309)
1 (b
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This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=&t2=IL2-UT0071-050
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Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Tncyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAMI1507 row: 1 column: 20
High quality sequence stop: 717.
Location/Qualifiers
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Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
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/Organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:520253"
/clone_lib="NIH_MGC_122"
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/dow_stage="Adult"
/dow_stage="Adult"
/note="Organ: uterus_tumor; Vector: puc18; Site_1: Smal;
Site_2: Smal; A min1-library was made by cloning products
Site_2: Smal; A min1-library was made by cloning products
delived from ORESTES PCR (U.S. Letters Patent application
No. 196,716 - Ludwig Institute for Cancer Research)
profiles into the pUC 18 vector. Reverse transcription of
tissue mRNA and cDNA amplification were performed under
low stringency conditions."

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603024487F1 NIH_MGC_114 Homo sapiens cDNA clone IMAGE:5194964 5',
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Clone distribution: MCC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov.n column: 21

Plate: LLAM11487 row: n column: 21

High quality sequence start: 5

High quality sequence stop: 711.
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NIH-MGC http://mgc.nci.nih.gov/
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: Gapbbs.remail.nih.gov
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
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Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9.4%; Score 46; DB 10;
100.0%; Pred. No. 1.3e-12
Live 0; Mismatches 0
                                                                                                                                               /organism="Homo sapiens"
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/clone_lib="UT0071"
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/clone="IMAGE:5194964"
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                      Seq primer: puc 18 forward
High quality sequence stop: 309.
Location/Qualifiers
900-144-B03&t3-2000-09-05&t4-1)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mRNA sequence.
BI756810
BI756810.1 GI:15748388
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Best Local Similarity 100.0
Matches 46; Conservative
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Query Match

Matches

BASE COUNT ORIGIN

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/ .275
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//db_xref="taxon:9606"
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//dev_stage="Adult"
//note="Organ: head_neck; Vector: puc18; Site_1: SmaI;
//note="Organ: head_neck; Vector: Site_1: SmaI;
//dev_stage="Conficial Conficial Confic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL (http://www.ludwig.org.br/scripts/gethtml2.pl?tl-&t2=cMl-HT0875-060 900-385-a05&t3=2000-09-06&t4=1) seq primer: puc 18 forward High quality sequence start: 4 High quality sequence start: 4 High quality sequence store: 275.
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 275)

Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,

Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,

Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,

Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare

M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
                                                                                                                                                                                     BF088272 275 bp mRNA linear EST 19-OCT-2000 CM-14T0875-060900-385-a05 HT0875 Homo sapiens CDNA, mRNA sequence.
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Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shotgun sequencing of the human transcriptome with ORF expressed sequence tags
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
20202663
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tel: +55-11-2704922
Fax: +55-11-2707001
Email: asimpson@ludwig.org.br
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BF088272.1 GI:10893982
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Best Local Similarity
Matches 32; Conserv
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/dev_arge="Adult"
/note="Organ: uterus_tumor; Vector: puc18; Site_1: SmaI;
Site_2: SmaI; A mini-library was made by cloning products
derived from ORESTES PCR (U.S. Letters Patent application
No. 196,716 - Ludwig Institute for Cancer Research)
profiles into the pUC 18 vector. Reverse transcription of
tissue mRNA and CDNA amplification were performed under
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This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=&t2=RC2-UT0023-290 700-011-b01&t3=2000-07-29&t4=1)
Seq primer: puc 18 forward
High quality sequence start: 7
High quality sequence start: 7
High quality sequence storp: 548.

Location/Qualifiers
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (Dases I to 550)
1 (Dases I to 550)
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Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         \operatorname{Simpson}, A.J. Shotgun sequencing of the human transcriptome with ORF expressed Shotgun
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                                                                                                                                                                        Length 817;
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                                                                                                                                                                                                          4.8e-08;
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                                                                                                                                                                            Score 37; DB 10;
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75 c 104 q 186 t
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                                                                                                                                                                    ch 7.6%; Score 37; DB 1 Similarity 100.0%; Pred. No. 4.8 37; Conservative 0; Mismatches
            206
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                209
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Matches 35; Conservi
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                     186
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JOURNAL MEDLINE COMMENT

TITLE

source

FEATURES

BASE COUNT ORIGIN

human.

ACCESSION VERSION KEYWORDS SOURCE ORGANISM

REFERENCE AUTHORS

DEFINITION

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                                                               Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 166)
Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R., Magai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F., Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H., Brunstein,A., deoliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note="Organ: uterus_tumor; Vector: puc18; Site_1: Smal; Site_2: Smal; A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Pattent application No. 196,716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Email: asimpsoneludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtmi2.pl?tl=RC2&t2=RC2-UT0023-10800-015-908 l&13=2000-08-11&t4=1)
Seq primer: puc 18 forward.
Location/Qualifiers
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Mammalla; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
I (bases 1 to 564)
Marra, M., Hillier, L., Allen, M., Bowles, M., Dietrich, N., Dubuque, T., Geisel, S., Kucaba, T., Lacy, M., Le, M., Martin, J., Morris, M., Schellenberg, K., Steptoe, M., Tan, F., Underwood, K., Moore, B., Theising, B., Wylie, T., Lennon, G., Soares, B., Wilson, R. and
                                                                                                                                                                                                                                                                                                                                                                                    Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
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VX08007.r1 Soares_thymus_2NbMT Mus musculus cDNA clone
IMAGE:1263863 5' similar to gb:U14332 Mus musculus interleukin 15
(MOUSE);, mRNA sequence.
AA863763
                                                                                                                                                                                                                                                  Simpson, A.J. Shotgun sequencing of the human transcriptome with ORF expressed
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100.0%; Pred. No. 0.00021;
.ive 0; Mismatches 0; Indels
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/clone_lib="UT0023"
/dev_stage="Adult"
                                                                                                                                                                                                                                                                                                                                                                 Contact: Simpson A.J.G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA863763.1 GI:2956242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tel: +55-11-2704922
Fax: +55-11-2707001
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                                                 Homo sapiens
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Waterston, R.
The WashU-HMI Mouse EST Project
L Unpublished (1996)
Contact: Marra M/Mouse EST Project
WashU-HMI Mouse EST Project
WashU-HMI Mouse EST Project
WashIngton University School of Medicinep
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tax: 314 286 1810
Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (Info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               vk38h11.rl Soares_mammary_gland_NbMMG Mus musculus cDNA clone IMAGE:948933 5' similar to gb:U14332 Mus musculus interleukin 15 AA544986 AA544986 IG:2306060
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Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T., Gelsel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M., Schellenberg,K., Sreptoe,M., Tan,F., Underwook,K., Moore,B., Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10000"
/db_xref="taxon:1263853"
/clone="IMAGE:1263853"
/clone="IMAGE:1263853"
/clone="IMAGE:1763853"
/clone="IMAGE:1763853"
/clone="IMAGE:1763853"
/clone="IMAGE:1763853"
/dev_stage="fymus"
/dev_stage="fymus"
/lab_host="DH108"
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0.00019;
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Seq primer: -28ml3 rev2 ET from Amersham
High quality sequence stop: 433.
Location/Qualifiers
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Contact: Marra MyMouse EST Project
WashU-HHMI Mouse EST Project
WashIngton University School of Medicinep
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BURATOCAS, Metazoa: Chordata: Craniata: Vertebrata; Euteleostomi;

BURATOCAS, Metazoa: Chordata: Craniata: Vertebrata; Euteleostomi;

Mammalia: Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1 (Dases 1 to 631)

Arakawa,T., Carninci,P., Fukuda,S., Furuno,M., Hanagaki,T., Hara,A.;

K., Hiramoto,R., Matsuyama,T., Ito,M., Kawai,J., Konno,H., Kouda,M., Koya,S., Matsuyama,T., Saito,R., Sakai,C., Sakai,K., Sano,H., Sasaki, D., Shibata,K., Shibata,R., 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         T 3/1; double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pT713 vector. RNA provided by Dr. Minoru Ko, Wayne State Univ. Library constructed and normalized by Bento Soares and M.Fatima
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note="Organ: mammary gland; Vector: pT7T3D-Pac (Pharmacia ) with a modified polylinker; Site_1: Not 1; Site_2: Eco RI; 1st strand cDNA was primed with a Not I - oligo(dT) primer [5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EST 26-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information. MGI:545789 seq primer: -28ml3 rev2 ET from Amersham
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0
Forest Park Parkway, Box 8501, St. Louis, MO 63108
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone="IMAGE:948933"
/clone_lib="Soares_mammary_gland_NbMMG"
/sex="male"
/tissu-pe="mammary gland"
/dev_stage="4 weeks"
/lab_host="DH10B"
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1. 590 / Organism="Mus musculus"
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                                                                                                           Email: mouseest@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                            /strain="C57BL/6J"
/db_xref="taxon:10090"
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RIKEN integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multicapillary sequencer. Genome Res. 10 (11), 1757-171 (2000)
10 (11), 1757-171 (2000)
11 Konno, H., Fukunishi, Y., Shibata, K., Itoh, M., Carninci, P., Sugahara, Y. and Hayashizaki, Y. Computer-based methods for the mouse full-length CDNA encyclopedia: real-time sequence clustering for construction of a nonredundant CDNA library. Genome Res. 11 (2), 281-289 (2001) Kondo, S., Shinagawa, A., Saito, T., Kiyosawa, H., Yamanaka, I., Aizawa Hayashizaki, Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ó
Email: genome-res@gsc.riken.go.jp,
URL:http://genome.gsc.riken.go.jp/
Carninci,P., Shibata,Y., Hayatsu,N., Sugahara,Y., Shibata,K., Itoh,M., Konno,H., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y.
Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes. Genome Res. 10 (10), 1617-1630 (2000)
wagi,K., Fujiwake,S., Inoue,K., Tagawa,M., Ohara,E., Watahiki,M., Yoneda,Y., Ishikawa,T., Ozawa,K., Tanaka,T., Matsuura,S., Kawai,J., Okazaki,Y., Muramatsu,M., Inoue,Y., Kira,A. and Hayashizaki,Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  was cleaved with BamHI and XhoI. Vector: a modified pBluescript KS(+) after bulk excision from Lambda FLC I." 146 c 143 g 173 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Computational Analysis of Full-Length Mouse CDNAs Compared with Human Genome Sequences. Mamm. Genome. 12, 673-677 (2001) Please visit our web site (http://genome.gsc.riken.go.jp) for further details.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /clone_lib="RIKEN full-length enriched, 0 day neonate kidney"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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hes 0;
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100.0%; Pred. No. 0.00015
tive 0; Mismatches
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/dev_stage="0 day neonate"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Mus musculus"
/db_xref="taxon:10090"
/clone="D630033E03"
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ORGANISM

KEYWORDS

AUTHORS TITLE

REFERENCE

JOURNAL MEDLINE COMMENT

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515 bp mRNA linear EST 22-DEC-2000 MI-P-03-aba-f-02-1-UM.sl MI-P-03 sus scrofa cDNA clone BF704348 BF704348.1 GI:11989750
                                           Dubuque, T.,
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Bonaldo,M.F., Lennon,G. and Soares,M.B.
Normalization and subtraction: two approaches to facilitate gene
                                                                                                                                                                                                                                                                                                                                                                                                                    Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
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1 (bases 1 to 429)
Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuc
Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M.,
Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B.,
Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and
                                                                                                                                                                            The Washu-HHMI Mouse EST Project
Unpublished (1996)
Contact: Marra MyMouse EST Project
Washu-HHMI Mouse EST Project
Washu-HHMI Mouse EST Project
Washington University School of Medicinep
444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Fax: 314 286 1810
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .429 /organism="Mus musculus"
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97044477
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Location/Qualifiers
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/db_xref="taxon:10090"
/clone="IMAGE:1282208"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MGI:674008
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REFERENCE
AUTHORS
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                                                                                                                                                                                                                                                                                                                               On Mar 10, 1998 this sequence version replaced gi:2948289.
Contact: Soares, MB
Program for Rat Gene Discovery and Mapping
University of Iowa
University of Iowa
University of Iowa
University of Iowa
Tel: 319 335 8550
Fax: 319 335 9565
Fax: 319 335 9567
Fax: 319 335 957
Fax: 310 335 957
Fax: 310 335 957
Fax: 310 335 957
Fa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /lab_lost="Did Life Technologies)"
//lab_lost="Did Life Technologies"
//lab Libraries Substructed for I Site_2: Eco RI: This library
//lab Riture of andividually tagged normalized
libraries constructed from rat placenta, adult lung, brain
//lab sching of 1-5 nucleotides present between the Not I
site and the Oilgo-dr track which allows identification of
the library of origin of a clone within the mixture."

94 c 82 g 130 t
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                                                                    Eukaryota; Métazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       house mouse.
Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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                                                                                                                                                            1 (bases 1 to 430)
Bonaldo,M.F., Lennon,G. and Soares,M.B.
Normalization and subtraction: two approaches to facilitate gene
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Pred. No. 0.0021;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /clone="UI_R-A0-aj-a-01-0-UI"
/clone_lib="UI-R-A0"
/dev_stage="adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Rattus norvegicus"
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100.0%; Pred. No. 0.00/
                                                                                                                                                                                                                                                                             Genome Res. 6 (9), 791-806 (1996)
97044477
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                                           norvegicus
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Matches 28; Conservative
                                                                                                                                                                                                                                                          discovery
                                                                                                                                      Rattus.
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                                           Rattus
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FEATURES

BASE COUNT ORIGIN

ACCESSION VERSION KEYWORDS SOURCE ORGANISM

DEFINITION

COCUS

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1...405
//crganism="Musmacculus"
/strain="C57BL/6J"
/dor_anism="Musmacculus"
/strain="C57BL/6J"
/dor_anism="Musmacculus"
/clone="U1-MBH2.2-aom-e-04-0-U1"
/clone="U1-MBH2.2-aom-e-04-0-U1"
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/dev_stage="U1-MBH2.2-aom-e-04-0-U1"
/dev_stage="U1-MBH2.2-aom-e-04-0-U1"
/dev_stage="U1-MBH2.P-Pac (Pharmacia) with a modified
polylinker; Site_1: Not i; Site_2: Eco RI; The
NIH_BMAP_M.S3.2 library is a subtracted library of the mouse
brain (cerebellum, brain stems, olfactory bulbs,
hypothalamus, cortex, amygdala, basal ganglia, pineal
gland, striatum, hipoccampus) after a series of
subtractions to reduce the representation of CDNAs from
which ESTS had already been generated in this
process: NIH_BMAP_MS3.2, NIH_BMAP_MS2, NIH_BMAP_MS1.
The subtracted library (NIH_BMAP_MS2, NIH_BMAP_MS2)
as follows: PCRamplified cDNA inserts from NIH_BMAP_MS2
clones from which 3' ESTS had been derived was used as a
driver in a hypbridization with the NIH_BMAP_MS2 library
in the form of single-stranded clibrary) was purified
shiph hydroxyapatite column chromorated library) was purified
shiph-arranded clicles (subtracted library) was purified
shiph-arranded clicles (subtracted library) was purified
              Email: mEST@mail.nih.gov
The sequence contained an oligo-dT track that was present in the oligonucleotide that was used to prime the synthesis of first strand cDNA and therefore this may represent a bonafide poly A tail. The sequence tag present in the cDNA between the NotI site and the oligo-dT track served to identify it as a clone from the normalized pineal glands library CDNA Library Preparation: M.B. soares Lab Clone distribution: NIH BMAP cDNA clones will be made available by the means that is soon to be determined. When NIH determines the means for distribution of the BMAP cDNA clones, this record will be updated accordingly when that means is determined.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lennon and Soares, Genome
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uw66b02.yl Soares_mammary_gland_NMLMG Mus musculus cDNA clone
IMAGE:3466923 5' similar to gb:U14332 Mus musculus interleukin 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               double-stranded circles and electroporated into bacteria (LifeTechnologies) to generate the NIH_BMAP_M_S3.2 library. This procedure has been previously described (Bonaldo, Lennon and Soares Research 6:791-806, 1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 405;
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100.0%; Pred. No. v.
... 0; Mismatches
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TAG_TISSUE=pineal-glands
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BE690327/c
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                                                                                                       Fax: 5152942401
Fax: 5152942401
Fax: 5152942401
Fmail: cktugale@iastate.edu
The sequence contained an oligo-dT track that was present in the oligouncleotide that was used to prime the synthesis of first strand cDNA and therefore this may represent a bonafide poly A tail. The sequence tag present in the cDNA between the Not1 site and the oligo-dT track served to verify it as a clone from the non-normalized ovary at estrus day 12 library CDNA Library Preparation: RJ Woods, JA Green, RS Prather S142 Animal Science Research Center, Department of Animal Science, University of Missouri-Columbia, 5221 Clone distribution: olones will be available through Research Genetics (www.resgen.com) The following repetitive elements were found in this cDNA sequence: 1-28, Seq primer: M13 Forward
POUXA-Yes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /strain="crossbreed"
/db_xref="taxon:9823"
/clone="im-P-03-aba-f-02-1-UM"
/clone=lib="MI-P-03"
/lab_host="DH10B (life Technologies)"
/note="vector: pT73D-pac (Pharmacia) with a modified
polylinker; Site_1: Not 1; Site_2: EcoR1; The MI-P-03
polylinker; Site_1: Not 1; Site_2: EcoR1; The MI-P-03
detailed description of the library from which this clone
was derived, please visit our web site at
matty://pigst.genome.iastate.edu/.
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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Bonaldo,M.F., Lennon,G. and Soares,M.B.

Normalization and subtraction: two approaches to facilitate gene
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Molecular Genetics Laboratory, Department of Animal Science
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TAG_TISSUE=ovary at estrus day 12
TAG_SEQ=TTGTAC"
                             Iowa State University
201 Kildee Hall, Ames, IA 50011–3150, USA
Tel: 5152944252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5.3%; Score 26; DB 10;
100.0%; Pred. No. 0.022;
iive 0; Mismatches 0;
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97044477
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AW121368.1 GI:6096701
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Best Local Similarity 100.0
Matches 26; Conservative
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               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (base 1 to 420) NCI-GGAP http://www.ncbi.nlm.nih.gov/ncicgap. NCI-GGAP http://www.ncbi.nlm.nih.gov/ncicgap.
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NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Unpublished (1997)
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434 bp mRNA linear EST 11-MAR-19
VK38h12.x1 Soares_mammary_gland_NbMMG Mus musculus cDNA clone
IMAGE:948935 3' similar to gb:Ul4332 Mus musculus interleukin 15
                                                                                                                                     Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
This Clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
MGI:1386.283
Seq. primer: -40RP from Gibco
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Email: cgapbs-r@mail.nih.gov
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
MGI:545791
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Pred. No. 0.77;
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                                                                                                                                                                                                                                                                                                                                                                   /db_xref="taxon:10090"
/clone="IMAGE:3466923"
/clone_1lb="Soares_mammary_gland_NMLMG"
/sex="female (lactating)"
/tissue_type="mammary gland"
/lab_host="DH10B"
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100.0%; Pred. No. ...
0; Mismatches
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AI503618.1 GI:4401469
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Matches 23; Conservative
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                                                                                                                        Tumor Gene Index
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/note="Organ: mammary gland; Vector: pT7T3D-Pac (Pharmacia ) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; 1st strand cDNA was primed with a Not I - oligo(dT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 T 3'); double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pT7T3 vector. RNA provided by Dr. Minoru Ko, Wayne State Univ. Library constructed and normalized by Bento Soares and M.Fatima
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Mammalia; Eutheria; Rodentia; Sclurognathi; Muridae; Murinae; Mus.
1 (bases I to 458)
Akimura, T., Arakawa, T., Carninci, P., Furuno, M., Hanagaki, T.,
Hayatsu, N., Hiramoto, K., Hiraoka, T., Hirozane, T., Imotani, K., Ishii,
Y., Ito, M., Kawal, J., Kojina, Y., Konno, H., Kouda, M., Matsuyama, T.,
Nakamura, M., Nishi, K., Nomura, K., Numasaki, R., Okazaki, Y., Okido, T.,
Saito, R., Sakai, C., Sakai, K., Sakazume, N., Saaki, D., Sato, K.,
Shinagawa, A., Shiraki, T., Sogaba, Y., Suzuki, H., Tagawa,
A., Takahashi, F., Takaku-Akahira, S., Tanaka, T., Tomaru, A., Towaliki, A., Takaku-Akahira, S., Tanaka, T., Tomaru, J., Toya, T.
Riken Bncyclopedia of Mouse Full-length cDNAs (Akimura, T., et al.
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Contact: Yoshihide Hayashizaki
Laboratory for Genome Exploration Research Group, RIKEN Genomic
Sciences Center(GSC), Yokohama Institute
The Institute of Physical and Chemical Research (RIKEN)
1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan
Tel: 81-45-503-9216
Email: genome-res@neo.ii.
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URL:http://genome.gsc.riken.go.jp,
Carninci.P., Shibata,Y., Hayatsu,M., Sugahara,Y., Shibata,K., Itoh
,M., Konno,H., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y.
Normalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapped discovery of new
genes. Genome Res. 10 (10), 1617-1630 (2000)
wagi,K., Fujiwake,S., Inoue,K., Togawa,Y., Izawa,M., Ohara,E.,
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0
/organism="Mus musculus"
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100.0%; Pred. No. 0.76;
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                                                                RIKEN integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multicapillary sequencer. Genome Res. . 10 (11), 1771-171 (2000)
10 (11), 1771-171 (2000)
Konno, H., Fukunishi, Y., Shibata, K., Itoh, M., Carninci, P., Sugahara, Y. and Hayashizaki, Y.
Computer-based methods for the mouse full-length cDNA encyclopedia: real-time sequence clustering for construction of a nonredundant cDNA library. Genome Res. . 11 (2), 281-289 (2001) Please visit our web site (http://genome.gsc.riken.go.jp) for further details.
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Marra M., Hillier, Allen, M., Bowles, M., Dietrich, N., Dubuque, T., Gelsel, S., Kucaba, T., Lacy, M., Le, M., Martin, J., Morris, M., Schellenberg, K., Steptoe, M., Tan, F., Underwood, K., Moore, B., Theising, B., Wylle, T., Lennon, G., Soares, B., Wilson, R. and
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Watahiki,M., Yoneda,Y., Ishikawa,T., Ozawa,K., Tanaka,T., Matsuura,S., Kawai,J., Okazaki,Y., Muramatsu,M., Inoue,Y., Kira,A. and Hayashizaki,Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AI120615 509 bp mRNA linear EST 02-SEP-199 uc28h10.rl Soares_mammary_gland_NbMMG Mus musculus cDNA clone IMAGE:1399363 5' similar to gb:U14332 Mus musculus interleukin 15
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Unpublished (1996)
Contact: Marra M/Mouse EST Project
WashU-HHMI Mouse EST Project
WashI-HHMI Mouse EST Project
WashIngton University School of MedicineP
444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.7%; Score 23; DB 9; Length 458; 100.0%; Pred. No. 0.76; 1.1ve 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
1. 458
/organism="Mus musculus"
/db_xref="taxon:10090"
/clone="G830036M09"
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A1152482
ud83d09.rl Soares_mammary_gland_NMLMG Mus musculus cDNA clone
IMAGE:1477457 5' similar to gb:Ul4332 Mus musculus interleukin 15
A1152482
                                                                                                                                                             /note="Organ: mammary gland; Vector: pT7T3D-Pac (Pharmacia ) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; 1st strand cDNA was primed with a Not I - oligo(dT)
                                                                                                                                                                                                                                                       Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 538)
Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T.,
Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M.,
Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., More,B.,
Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and
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Washington University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: mouseest@watson.wustl.edu
Fhis clone is available royalty free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
MGI:925813
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/db_xref="taxon:10090"
/clone="IMAGE:1471457"
/clone_lib="Soares_mammary_gland_NMLMG"
/sex="female [lactating]"
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/lab_host="DH108"
/db_xref="taxon:10090"
/clone="IMAGE:1399363"
/clone_lib="Soares_mammary_gland_NbMMG"
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                                                                                             /tissue_type="mammary gland"
/dev_stage="4 weeks"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                          134 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.7%; Score 23; DB 100.0%; Pred. No. 0.7 tive 0; Mismatches
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Unpublished (1996)
Contact: Marra M/Mouse EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                          6 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          404 ATTGTCCAAATGTTCATCAACAC 426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    460 ATTGTCCAAATGTTCATCAACAC 482
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                                                                         /sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                        Bonaldo."
108 c
                                                                                                                                                                                                                                    primer [5'
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Matches 23; Conservative
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565 GCTGGCATTCATGTCTTCATTT 586

RESULT

us-09-724-841-4.oli12.rst

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/note="Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker: 1st strand cDNA was prepared from mammary gland tissue from a lactating female, and was then primed with a Not I - 0.11go(dT) primer. Double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not modified pT7T3 vector. Library is normalized. Library was constructed be 103 pento Soares and M. Fatima Bonaldo."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BIG85688 825 Pp mRNA linear EST 18-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 826) NIH-MGC http://mgc.nci.nih.gov/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              L morbilished (1999)
Contact: Robert Strausberg, Ph.D.
Email: capabar "Femail.nih.gov
Tissue Procurement: Jeffrey Green M.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incycle Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
Clone distribution: WGC clone distribution for http://mage.llni.gov
Plate: LLAMI1877 row: j column: 07
High quality sequence stop: 826.
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/clone_lib="NCI_CGAP_Mam6"
/sex="female, virgin"
/tissue_type="infiltrating ductal.carcinoma"
/dev_stage="5 months"
/lab_host="DH108"
                                                                                                                                                                                                                                                                                                  4.7%; Score 23; DB 9; Length 538; 100.0%; Pred. No. 0.75; Live 0; Mismatches 0; Indels
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Pred. No. 2.4;
0; Mismatches 0; Indels
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/organism="Mus musculus"
/strain="FVB/N"
/db_xref="taxon:10090"
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7 100.0%; Pred
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Fobulus tremula x Populus tremuloides.

Populus tremula x Populus tremuloides

Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;

Rosidae: eurosids I: Malpighiales; Salicaceae; Populus.

1 (bases I to 560)

Sterky.F., Regan,S., Karlsson,J., Hertzberg,M., Rohde,A., Holmberg,A., Amin,B., Bhalerao,R., Larsson,M., Villarroel,R., Van Montagu,M., Sandberg,G., Olsson,O., Teerl,T.T., Boerjan,W., Gustafsson,P., Uhlen,M., Sundberg,B. and Lundeberg, B. and Lundeberg, E. S,692 expressed sequence tags

L. Proc. Natl. Acad. Sci. U.S.A. 95 (22), 13330-13335 (1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .560

/organism="Populus tremula x Populus tremuloides"
/Organism="Populus tremula x Populus tremuloides"
/Ob_xref="taxon:47664"
/Clone_lib="Hybrid aspen plasmid library"
/Lissue_Lype="Cambial region"
/dev_stage="1.5 m actively growing tree"
/lab_host="E.coli"
/note="Vector: pluescript SK: Site_1: SalI; Site_2: NotI;
Cambial region tissues, including developing and mature meristematic cambial zone and the developing and mature philoem, was harvested from 1.5 m actively growing trees.
CDNA was prepared and cloned into lambda 9t22a. DNA was isolated and subcloned into pBluescript SK using SalI and NotI restriction enzymes."

NotI restriction enzymes."

2 others
                      AI161778 560 bp mRNA linear EST 03-DEC-1998 A006P68U Hybrid aspen plasmid library Populus tremula x Populus tremuloides cDNA 5', mRNA sequence.
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BB664509.1 GI:16498263
EST.
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Department of Biotechnology
Royal Institute of Technology (KTH)
Teknikringen 34, S-100 44 STOCKHOLM, Sweden
Far: +46 8 790 8287
Fax: +46 8 24 54 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FORWARD: AAAGGGGATGTGCTGCAAGGGG
BACKWARD: GCTTCCGCTCGTATGTGTGTG
Seq primer: CGTTGTAAAACGACGCCAG
High quality sequence stop: 560.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: fredrik@biochem.kth.se
PCR PRimers
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AI161778.1 GI:3853063
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Gaps

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85 GCTGGCATTCATGTCTTCATTT 106

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22; Conservative

Matches

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LOCUS A1596704 690 bp mRNA linear EST 21-APR-1999 DEFINITION vk38h11.y1 Soares_mammary_gland_NbMMG Mus musculus cDNA clone
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/clone_lib="PTB Chimpanzee Male BAC Library"
115 c 121 g 160 t 2 others
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                                                                                                                         Length 652;
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/organism="Pan troglodytes"
/db_xref="taxon:9598"
/clone="PTB-101G10.R"
                                                                                                                                                                                    Mismatches
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100.0%; Pre-
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R.Site 1 : SacI
R.Site 2 : SacI.
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                                                                                                                                                                                                                                                   418 GAGGAAAAAATATTAAAGAA 438
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                                                                                                                                                                                        Conservative
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The Institute of Physical and Chemical Research (RIKEN)
1-7-22 Suehlro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan Tel: 81-45-503-9212
Fax: 81-45-503-9212
Fax: 81-45-503-9216
Fax: 81-45-503-921
Fax: 81-45-503
Fax: 81-45-503
Fax:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RIKEN integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multicapillary sequencer. Genome Res. 10 (11), 175-1771 (2000)

Konno, H., Fukunishi, Y., Shibata, K., Itoh, M., Carninci, P., Sugahara, Y. and Hayashizaki, Y.
Computer-based methods for the mouse full-length CDNA encyclopedia: real-time sequence clustering for construction of a nonredundant CDNA library. Genome Res. 11 (2), 281-289 (2001)

Kondo, S., Shinagawa, A., Saito, T., Kiyosawa, H., Yamanaka, I., Aizawa, K., Pukuda, S., Hara, A., Itoh, M., Kawai, J., Shibata, K. and Hayashizaki, Y.
Computational Analysis of Full-Length Mouse CDNAs Compared with
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                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human Genome Sequences. Manm. Genome. 12, 673-677 (2001)
Please visit our web site (http://genome.gsc.riken.go.jp) for
further details.
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                                                                                                                                                                                                                                                                                                                                                                         RIKEN Mouse ESTs (Arakawa,T., et al. 2001)
Unpublished (2001)
Contact: Yoshihide Hayashizaki
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/dev_stage="0 day neonate"
/lab_host="DH10B"
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/db_xref="taxon:10090"
/clone="E030042P04"
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Location/Qualifiers
1. 652
                             Mus musculus
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Submitted (02-M0G-2001) Asao Fujiyama, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC);
1-7-22 Suehiro-chou, Taurumi-ku, Vokohama, Kanagawa 230-0045, Japan (E-mail.chimpbesegsc.riken.go.jp, URL:http://hgp.gsc.riken.go.jp/, Tel:g1-45-503-9117)
Tel:g1-45-503-9117, Fax:g1-45-503-9170)
Clones are derived from the chimpanzee BAC library PTB This BAC end was generated during the R&D process and may have higher chance of
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pan'troglodytes male lymphoblast DNA, clone_lib:PTB Chimpanzee Male BAC Library clone:PTB-101G10.R.
Pan troglodytes
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Pan troglodytes DNA, clone: PTB-101G10.R, genomic survey sequence.
AG099196
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Pan.
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BAC end sequences of Library PTB
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 (bases 1 to 687)
Fujiyama,A., Hattori,M., Toyoda,A., Taylor,T.D., Yada,T.,
Totoki,Y., Watanabe,H. and Sakaki,Y.
Direct Submission
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                                                                                                                                                                                                                                                                                                             This read is a RESEQUENCE of a previously sequenced mouse clone. This read has been verified (found to hit its original self in the correct orientation)
Seq primer: -40RP from Gibco
High quality sequence stop: 466.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CPG2625A CPIOWAGDNA1 Cryptosporidium parvum genomic, DNA sequence. AQ935740 AQ935740. GI:6637953
                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (20 690)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Unpublished (1997)
IMAGE:948933 5' similar to gb:U14332 Mus musculus interleukin 15
(MOUSE);, mRNA sequence.
                                                                                                                                                                                                                              Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
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Cryptosporidium parvum
Cryptosporidium parvum
Bukaryota; Alveolata; Apicomplexa; Coccidia; Eimeriida;
Cryptosporidiidae;
Cryptosporidiidae;
1 (bases 1 to 742)
Strong, W.B. and Nelson, R.G.
Preliminary profile of the Cryptosporidium parvum genome: an
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone_lib="Soares_mammary_gland_NbMMG"
/sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.3%; Score 21; DB 9;
100.0%; Pred. No. 7.8;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /tissue_type="mammary gland"
/dev_stage="4 weeks"
/lab_host="DH108"
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                                                                                                                                                                                                                                                                                                                                                                                                               1. .690
/organism="Mus musculus"
/strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /db_xref="taxon:10090"
/clone="IMAGE:948933"
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                               AI596704
AI596704.1 GI:4605752
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177 c
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Best Local Similarity
                                                                                                  Mus musculus
                                                                                    house mouse
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/strain="IOWA"
/db_xref="taxon:5807"
/db_xref="lowA"
/db_xref="lowA"
/db_xref="lowA"
/clone_lib="CplOwAgDNA1"
/lab_host="E. coll XL2 Blue MRF'"
/note="Vector: pBlueScript II (SK-); Site_1: ECORV; C.
parvum (IOWA isolate) genomic DNA was hydrodynamically sheared to produce fragments having a tight size distribution between 2-4 kb by Dr. Yvonne Thorstenson of the Stanford DNA Sequencing and Technology Center (http://sequence-www.stanford.edu/group/techdev/shear.htm)
/ The randomly sheared gDNA was chromatographed on Sephacryl S-400 to remove any small fragments and DNA eluting in the void volume was subcloned into an ECOR V-digested, alkaline phosphatase-treated pBlueScript II (SK-) vector and transformed into E. coli strain XL2 Blue MRF'. Recombinant clones from the first plating of the library were selected for sequence analysis using T3 and T7 primers."
                                                                                                                                                                             Francisco.

Box 0811, San Francisco, CA 94143-0811, USA
Tel: 415 206 8846
Fax: 415 206 3345
Email: malaria@itsa.ucsf.edu
For Annotation Data see http://medsfgh.ucsf.edu/id/CpTags/home.html
Seq primer: M13(-21) forward
Class: shotgun.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutherla; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 820)
Mahairas, G.G., Wallace, J.C., Smith, K., Swartzell, S., Holzman, T.,
Keller, A., Shaker, R., Furlong, J., Young, J., Zhao, S., Adams, M.D. and
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#8.2064_A2_F10_T7_CIT_Approved Human Genomic Sperm Library D Homo saplens genomic clone Plate=2064_COl=20 Row=K, DNA sequence.

AQ247270
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                                                                                               Contact: Nelson, R. G.
Depts. of Medicine & Pharmaceutical Chemistry
San Francisco General Hospital-University of California, San
expressed sequence tag and genome survey sequence analysis Mol. Biochem. Parasitol. 107 (1), 1-32 (2000) 20183851
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100.0%; Pred. No. 7.8;
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High Throughput Sequencing Center
University of Washington
401 Ueen Anne Avenue North, Seattle, WA 98109, USA
Tel: (206) 616-3618
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1. 742
/organism="Cryptosporidium parvum"
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1. (bases 1 to 204)

8. Konno, H., Alzawa, K., Akahira, S., Akiyama, J., Arakawa, T., Carninci
P., Endo, T., Fukuda, S., Fukunishi, Y., Hara, A., Hayatsu, N.,
Izawa, H., Kadota, K., Kagawa, T., Ishikawa, J., Ishikawa, T., Itch, M.,
Izawa, M., Kadota, K., Kagawa, T., Kai, C., Kawai, J., Kikuchi, N.,
Izawa, M., Kadota, K., Miki, K., Mizuno, Y., Namanra, C., Kusakabe, M.,
Matayyama, T., Miki, K., Mizuno, Y., Nakamura, M., Oda, H., Okazaki, Y.,
Ono, T., Owa, C., Saito, H., Sakai, C., Sato, K., Shibata, K., Shigemoto, Y., Shinagawa, A., Takahashi, F., Tominaga, N., Toya
, T., Tsunoda, Y., Watahiki, A., Watanabe, S., Yamamura, T., Yamanaka, T., Yano, R., Yasunishi, A., Yokota, T., Yoshida, K., Yoshino
M., Muramatsu, M. and Hayashizaki, Y.
Contact: Yoshinde Hayashizaki, P., Contact: Yoshinda, P., Mananaka, M., Miramatsu, Miram
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BB467257 RIKEN full-length enriched, 12 days embryo eyeball Mus musculus cDNA clone D230013C16 3' similar to S59342 nuclear pore BB467257
                                                                                                                           Class: BAC ends
High quality sequence stop: 820.
Location/Qualifiers
1. 820
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/db_xref="taxon:9606"
/clone="Plate=2064 Col=20 Row=K"
/clone_lib="CIT Approved Human Genomic Sperm Library D"
/sex="male"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               207 t
Fax: (206) 616-3887
Emall: jwallace@u.washington.edu
Sequence Tagged Connector
Plate: 2064 row: K column: 20
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Matches 21; Conservative
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LOCUS
DEFINITION
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VERSION
KEYWORDS
SOURCE
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AUTHORS
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RS Konno, H., Alazwa, K., Akahira, S., Akiyama, J., Arakawa, T., Carninci, P., Endo, T., Fukuda, S., Fukunishi, Y., Hara, A., Hayatsu, N., Hirozane, T., Hori, F., Ishii, Y., Ishikawa, J., Ishikawa, T., Itoh, M., Izawa, M., Kadota, K., Kada, C., Kawai, J., Kikuchi, N., Kiyosawa, H., Kojima, Y., Kondo, S., Koya, S., Kurihara, C., Kusakabe, M., Matsuyama, T., Miki, R., Matuno, Y., Nakamura, M., Oda, H., Okazaki, Y., Matsuyama, T., Miki, R., Matuno, Y., Sato, K., Shibata, K., Sugahara, Y., Suzuki, H., Yaqawa, A., Takahashi, F., Tominaga, N., Toya, Yano, K., Yasunishi, A., Yokota, T., Yoshida, K., Yoshiki, A., Yoshino, M., Muramatsu, M. and Hayashizaki, Y. RIKEN Mouse ESTS (Konno, H., et al.)
                                                                                                                                                                                                                                                                                                                                                                                                        BB213861 RIKEN full-length enriched, adult male acrta and vein Mus musculus cDNA clone A530014K14 3' similar to S59342 nuclear pore BB213861
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 224)
Automated filtration-based high-throughput plasmid preparation system. Genome Res. 9 (5), 463-470 (1999)
Garninci,P. and Hayashizaki,Y.
High-efficiency full-length cDNA cloning. Methods Enzymol. 303, 19-44 (1999)
                                                                                                                                                                                                                                                                                            /clone_lib="RIKEN full-length enriched, 12 days embryo eyeball"
                                                                                                    please visit our web site (http://genome.rtc.riken.go.jp) for further details.
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red. No. 28;
Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                               /tissue_type="eyeball"
/dev_stage="12 days embryo"
/lab_host="DH10B"
                                                                                                                                                                       Location/Qualifiers
1. .204
/organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.1%; Score 20;
100.0%; Pred. No.
tive 0; Mismatcl
                                                                                                                                                                                                                                                /db_xref="taxon:10090"
/clone="D230013C16"
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Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus
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COMMENT

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ISM MUS musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostoml;
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostoml;
Eukaryota; Metazoa; Chordata; Sciurognathi; Muridae; Murinae; Mus.

E 1 (bases 1 to 286)

Konno, H., Aizawa, K., Akahira, S., Akiyama, J., Arakawa, T., Carninci
P., Endo, T., Fukuda, S., Fukunishi, Y., Hara, A., Hayatsu, N.,
Hirozane, T., Hori, F., Ishil, Y., Ishikawa, J., Ishikawa, T., Itoh, M.,
Izawa, M., Kadota, K., Kagawa, I., Kal, C., Kawal, J., Kikuchi, N.,
Matsuyama, H., Kojima, Y., Kondo, S., Koya, S., Kurihara, C., Kusakabe, M.,
Matsuyama, T., Miki, R., Mizuno, Y., Nakamura, M., Oda, H., Okasaki, Y.,
Ono, T., Owa, C., Saito, H., Sakal, C., Sato, K., Shibata,
'Y., Shigemoto, Y., Shinagawa, A., Shiraki, T., Soqabara, Y.
Suzuki, H., Suzuki, H., Tagawa, A., Takahashi, F., Tominaga, N., Toya
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3']; double stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pT/T3 vector. RNA provided by Dr. Bertrand Jordan. Library went through two rounds of normalization, and was constructed by Bento Soares and M.Fatima Bonaldo."
                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (Dases 1 to 253)
NCI-CGAP http://www.ncbl.nlm.nlh.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                               Email: cgapbs-r@mail.nih.gov
This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information. This clone was previously sequenced on the 5' end only, this new data is from the 3' end
High quality sequence stop: 247.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BB141025
BB141025 RIKEN full-length enriched, adult female vagina Mus musculus cDNA clone 9930003P08 3' similar to S59342 nuclear pore complex glycoprotein p62, mRNA sequence.
BB141025. GI:8795962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.1%; Score 20; DB 9; Length 253; 100.0%; Pred. No. 27; ive 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone_lib="Soares_thymus_2NbMT"
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Mismatches
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/organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="IMAGE:583435"
                                                                                                                                                                                                                            Contact: Robert Strausberg, Ph.D.
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                                                                                                                                                                                                      Unpublished (1997)
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                                                                                                                                                                                  Tumor Gene Index
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                                                                                                          REFERENCE
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VERSION
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BB141025
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URL:http://genome-gsc.riken.go.jp,
URL:http://genome-gsc.riken.go.jp,
URL:http://genome-gsc.riken.go.jp,
URL:http://genome-gsc.riken.go.jp,
URL:http://genome-gsc.riken.go.jp,
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N. Okazaki,Y., Muramatsu,M. and Hayashizaki,Y.
Thermostabilization and thermoacrivation of thermolabile enzymes by
trehalose and its application for the synthesis of full length
cDNA. Proc. Natl. Acad. Sci. U.S. A. 95 (2), 520-524 (1998)
Itch,M., Kitsunai,Y., Akiyama,J., Shibata,K., Izawa,M., Kawai,J.,
Y. and Hayashizaki,Y.
Automated filtration-based high-throughput plasmid preparation
System. Genome Res. 9 (5), 463-470 (1999)
Carninci,P. and Hayashizaki,Y.
High-efficiency full-length cDNA cloning. Methods Enzymol. 303,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Laboratory for Genome Exploration Research Group, RIKEN Genomic Schences Center(GSC), Yokohama Institute
The Institute of Physical and Chemical Research (RIKEN)
1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan Fax: 81-45-503-922
Fax: 81-45-503-9216
Email: genome-res@gsc.riken.go.jp,
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3', mRNA sequence.
AI47397
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/db_xref="taxon:10090"
/clone="£530014k14"
/clone_lib="RIKEN full-length enriched, adult male aorta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Please visit our web site (http://genome.rtc.riken.go.jp) for
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Pred. No. 28;
0; Mismatches 0; Indels
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Contact: Yoshihide Hayashizaki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         further details.
Location/Qualifiers
1. 224
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100.0%; Pre
0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81 TGAAGCTGGCATTCATGTCT 100
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EST.
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Matches 20; Conservative
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FEATURES

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Gaps .; 0 EST 28-JUN-2000

Query Match

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A1447397/C DEFINITION ACCESSION

RESULT

VERSION KEYWORDS

BASE COUNT

Total States

TITLE JOURNAL

COMMENT

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is Konno, H., Atawa, K., Akahira, S., Akiyama, J., Arakawa, T., Carninci, F., Endo, T., Fukuda, S., Fukunishi, Y., Hara, A., Hayatsu, N., Hara, A., Hayatsu, N., Ish, Kadota, T., Horl, Y., Eshi, Y., Hara, J., Ish, Kawa, J., Ish, Kawa, J., Ish, Kawa, J., Kikuchi, N., Kiyosawa, H., Kodita, K., Kagawa, I., Kai, C., Kawai, J., Kikuchi, N., Kiyosawa, H., Kojima, Y., Kondo, S., Koya, S., Kurihara, C., Kusakabe, M., Matsuyama, T., Miki, R., Mizuno, Y., Nakamura, M., Oda, H., Okazaki, Y., Owa, C., Saito, H., Sakai, C., Sato, K., Shibata, Y., Shinagawa, A., Shiraki, T., Sogabe, Y., Sugahara, Y., Suzuki, H., Suzuki, H., Tagawa, A., Takahashi, F., Tominaga, N., Toya, T., Tsunoda, Y., Watahiki, A., Wokota, T., Yano, R., Yasunishi, A., Wokota, T., Yoshida, K., Yoshiki, A., Yokota, T., Yoshida, K., Yoshiki, A., Yoshino, M., Muramatsu, M. and Hayashizaki, Y.

N., Muramatsu, M. and Hayashizaki
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Fax: 81-45-503-9218
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Thermostabilization and thermoactivation of thermolabile enzymes by trehalose and its application for the synthesis of full length CDNA. Proc. Natl. Acad. Sci. U.S.A. 95 (2), 520-524 (1998)
Itoh, M., Kitsunai, T., Akiyama, J., Shibata, K., Izawa, M., Kawai, J., Y. and Hayashizaki, Y., Carninci, P., Shibata, Y., Ozawa, Y., Muramatsu, M., Okazaki, Y. and Hayashizaki, Y., Cawa, Genome Res. 9 (5), 463-470 (1999)
Carninci, P. and Hayashizaki, Y.
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 288)
BB003966 RIKEN full-length enriched, 10 day neonate skin Mus musculus cDNA clone 4732457L13 3' similar to S59342 nuclear pore complex glycoprotein p62, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                High-efficiency full-length cDNA cloning. Methods Enzymol. 303,
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/db_xref="teaxon:10090"
/clone="473257L13"
/clone_lib="RIKEN full-length enriched, 10 day neonate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Please visit our web site (http://genome.rtc.riken.go.jp) for
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /tissue_type="skin"
/dev_stage="10 days neonate"
/lab_host="DH10B"
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VERSION
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JOURNAL
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                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
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URL:http://genome.gsc.riken.go.jp,
Carninci.P., Nishlyama.Y.; Westover,A., Itoh,M., Nagaoka,S., Sasaki,A., N. Okazaki,Y.
N. Okazaki,Y., Muramatsu,M. and Hayashizaki,Y.
Thermostabilization and thermoactivation of thermolabile enzymes by trehalose and its application for the synthesis of full length CDNA. Proc. Natl. Acad. Sci. U.S.A. 95 (2), 520-524 (1998)
Itoh,M., Kitsunal,T., Akiyama,J., Shibata,K., Izawa,M., Kawai,J.,
Tomaru,Y., Carninci,P., Shibata,Y., Ozawa,Y., Muramatsu,M., Okazaki
Automated filtration-based high-throughput plasmid preparation
Carninci,P. and Hayashizaki,Y.
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'T., Tsunoda,Y., Watahiki,A., Watanabe,S., Yamamura,T., Yamanaka,I., Yano,R., Yasunishi,A., Yokota,T., Yoshida,K., Yoshiki,A., Yoshino,M., Muramatsu,M. and Hayashizaki,Y.
RIKEN Mouse ESTs (Konno,H., et al.)
Unpublished (2000)
Contact: Yoshihide Hayashizaki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to prepare mouse tissues. 1st strand cDNA was primed with a primer [6].
                                                                                                                                                                                            Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center(GSC), Yokohama Institute
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Fax: 81-45-503-9216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               High-efficiency full-length cDNA cloning. Methods Enzymol. 303,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19-44 (1999)
Please visit our web site (http://genome.rtc.riken.go.jp) for
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="Site_1: Sal1; Site_2: BamHI; cDNA library was
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100.0%; Pred. No. 27;
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1. 286
// Organism="Mus musculus"
//db_xref="taxon:10090"
/clone="9930003908"
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/dev_stage="adult"
/lab_host="DH10B"
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source

FEATURES

Query Match

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RESULT 43 BB003966 LOCUS

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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1 (bases 1 to 294)

2 Konno, H., Alzawa K., Akahira, S., Akiyama, J., Arakawa, T., Carninci
P., Endo, T., Fukuda, S., Fukunishi, Y., Hara, A., Hayatsu, N.,
Hirozane, T., Horl, F., Ishi, Y., Ishikawa, T., Itch, M.,
Izawa, M., Kadota, K., Kagawai, T., Kai, C., Kawai, J., Kikuchi, N.,
Kiyosawa, H., Kojima, Y., Kodok, S., Koya, S., Kurihara, C., Kusakabe, M.,
Matsuyama, T., Miki, R., Mizuno, Y., Nakamura, M., Oda, H., Okazaki, Y.,
Ono, T., Owa, C., Saito, H., Sato, K., Shibata, Y., Shidama, A., Shiraki, T., Sogabe, Y., Suzuki, H., Tagawa, A., Shiraki, T., Yoshibata, Y., Watahiki, A., Yokota, T., Yamanusa, T., Yamanaka, I., Yano, R., Yasunishi, A., Yokota, T., Yamanusa, T., Yamanaka, I., Yano, R., Yasunishi, A., Yokota, T., Yamanusa, T., Yamanaka, I., Yano, R., Yasunishi, A., Yokota, T., Yamanusa, T., Yamanaka, I., Yano, R., Yasunishi, A., Yokota, T., Yamanusa, T., Yamanaka, I., Yano, R., Kasusa, M., Muramatsu, M., Muramatsu, M., Muramatsu, M., Muramatsu, M., Muramatsu, M., Matanabe, S., Yamamusa, T., Yashihod Hayashizaki, Y., Contact: Yoshihod Hayashizaki, Y.
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Itoh,M., Kitsunai,Y., Akiyama,J., Shibata,K., Izawa,M., Kawai,J., Y. and Hayashizaki,Y., Ozawa,Y., Muramatsu,M., Okazaki,Y. and Hayashizaki,Y., Ozawa,Y., Muramatsu,M., Okazaki, Automated filtration-based high-throughput plasmid preparation system. Genome Res. 9 (5), 463-470 (1999)
Carninci,P. and Hayashizaki,Y.
EST 22-JUN-2000
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Please visit our web site (http://genome.rtc.riken.go.jp) for
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100.0%; Pre
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/organism="Mus musculus"

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Eukaryota; Metazoa; Chordata; Cranlata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 294)

1 (bases 1 to 294)

2 Konno, H., Alzawa, K., Akahira, S., Akiyama, J., Arakawa, T., Carninci, P., Endo, T., Fukuda, S., Fukunishi, Y., Hara, A., Hayatsu, N., Hiozama, T., Edwil, Y., Sahikawa, T., Itch, M., Izawa, M., Kadota, K., Kagawa, T., Kai, C., Kawai, J., Kikuchi, N., Kiyosawa, H., Kojima, Y., Kondo, S., Koya, S., Kurihara, C., Kusakabe, M., Macsupama, T., Miki, R., Mizuno, Y., Nakamura, M., Oda, H., Okazaki, Y., Ono, T., Owa, C., Salto, H., Sakai, C., Sato, K., Shibata, Y., Shibata, Y., Shinagawa, A., Shiraki, T., Sogabe, Y., Shibata, Y., Shinagawa, A., Takahashi, F., Tominaga, N., Toya, T., Tsunoda, Y., Watahiki, A., Yokota, T., Yamamura, T., Yamanaka, I., Yano, R., Yasunishi, A., Yokota, T., Yamamura, T., Yamanaka, I., Yamanaka, M., Muramatsu, M., Muramatsu, M., Malasabizaki, Y., Voshino, M., Muramatsu, M., Malasabizaki, Y., Voshida, K., Yoshino, M., Muramatsu, M., Manamatsu, M., Muramatsu, M., Manamatsu, M., Muramatsu, M., Manamatsu, M., Muramatsu, M., Manamatsu, M., Ma
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                                                                                                                                                                                                                                                                                                                      /note="Site_1: Sall; Site_2: BamHI; cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to prepare mouse tissues. 1st strand cDNA was GAGAGAGAGACCAAGAGCTCTTTTTTTTTTTTVN 3'], cDNA was
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center(GSC), Yokohama Institute Sciences Center(Physical and Chemical Research (RIKEN) 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan Tel: 81-45-503-9222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3']. CDNA was cloned into the XhoI and BamHI sites.
Vector: a modified pBluescript KS(+) after bulk excision from Lambda FLC I" 98 t
                                                                         /clone_lib="RIKEN full-length enriched, 10 day neonate
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                                                                                                                                                                                                      /tissue_type="skin"
/dev_stage="10 days neonate"
/lab_host="DH10B"
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Unpublished (2000)
/db_xref="taxon:10090"
/clone="4732471F04"
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//note="Sile_Dilub"
//note=
Dmail: genome_resegsc.riken.go.jp,
URL:http://genome.gsc.riken.go.jp,
Carninci.p., Nishlyama.Y., Westover.A., Itoh,M., Nagaoka,S., Sasaki,N., N., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y.
Thermostabilization and thermoactivation of thermolabile enzymes by trehalose and its application for the synthesis of full length CDNA. Proc. Natl. Acad. Sci. U.S.A. 95 (2), 520-524 (1998)
Itoh,M., Kitsunai,T., Akiyama,J., Shibata,K., Izawa,M., Kawai,J., Tomaru,Y., Carninci,P., Shibata,Y., Okawai,Y., Muramatsu,M., Okazaki,Y. and Hayashizaki,Y.
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Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 295)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /clone_lib="RIKEN full-length enriched, 9.5 days embryo parthenogenote"
                                                                                                                                                                                                                                                                                                                                                                                                            Automated filtration-based high-throughput plasmid preparation system. Genome Res. 9 (5), 463-470 (1999)
Carninci.P. and Hayashizaki.Y.
High-efficiency full-length cDNA cloning. Methods Enzymol. 303, 19-44 (1999)
Please visit our web site (http://genome.rtc.riken.go.jp) for further details.
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tive 0; Mismatches
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/dev_stage="9.5 days embryo"
/lab_host="DH10B"
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Hirozane, T., Hori, F., Ishii, Y., Ishikawa, J., Ishikawa, T., Itoh, M., Kadota, K., Kagawa, I., Kai, C., Kawai, J., Kikuchi, N., Kiyosawa, H., Kojima, Y., Kondo, S., Koya, S., Kurihara, C., Kusakabe, M., Matsuyama, T., Miki, R., Misuno, Y., Nakamura, M., Oda, H., Okazaki, Y., Ono, T., Owa, C., Saito, H., Sakai, C., Sato, K., Shibata, Y., Shigemoto, Y., Shingawa, A., Shiraki, T., Soadbe, Y., Sudahara, Y., Suzuki, H., Tagawa, A., Shiraki, T., Soadbe, Y., Sudahara, Y., Suzuki, H., Tagawa, A., Shiraki, T., Yoshida, K., Yamanaka, I., Yano, R., Yasunishi, A., Watanabe, S., Yamamura, T., Yamanaka, I., Yano, R., Yasunishi, A., Watanabe, S., Yamamura, T., Yamanaka, I., Yano, R., Yasunishi, A., Watanabe, S., Yamamura, T., Yamanaka, I., M., Muramatsu, M. and Hayashizaki, Y. Gontact: Yoshihide Hayashizaki, Y. Gontact: Yoshihide Hayashizaki, Y. Gontact: Yoshihide Hayashizaki, Y. Shilaba, Suehiro-cho, Tsurumi-ku, Yokohama, Rasearch Group, RIKEN Genomic Sciences Center(GSC), Yokohama Institute of Physical and Chemical Research (RIKEN)
Tel: 81-45-503-9222
Email: genome-reségsc.riken.go.jp, URL:http://genome.gsc.riken.go.jp, URL:http://genome.gsc.riken.go.jp, URL:http://genome.gsc.riken.go.jp, URL:http://genome.gsc.riken.go.jp, URL:http://genome.gsc.riken.go.jp, URL:http://genome.gsc.riken.go.jp, Thermostabilization and thermostcivation of thermostabilization and thermostcivation for the synthesis of full length CDNA. Rock M., Kitsunai, P., Shibata, Y., Ozawa, Y., Muramatsu, M., Kitsunai, P., Shibata, Y., Ozawa, Y., Muramatu, Y., Carninci, P., Watawa, Y., Carninci, P., Watawa, Y., Carninci, P., Watawa, Y., Carninci, P., Shibata, Y., Ozawa, Y., Muramatu, Y., Carninci, P., Shibata, Y., Ozawa, Y., Muramatu, Y., Carninci, P., Shibata, Y., Ozawa, Y., Mayawa, Y., Carninci, P., Shibata, Y., Ozawa, Y., Mayawa, Y., Carninci, P., Sh
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/db_raref="taxon:10090"
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/clone_lib="RIKEN full-length enriched, adult male bone"
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Carninci, P. and Hayashizaki, Y.
High-efficiency full-length cDNA cloning. Methods Enzymol. 303,
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/dev_stage="adult"
/lab_host="DH10B"
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Sciurognathi; Muridae; Murinae; Mus.
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URL:http://genome-resegac.riken.go.jp,
URL:http://genome-gac.riken.go.jp,
Carninci,P. Nishiyama,Y., Westover,A., Itoh,M., Nagaoka,S., Sasaki
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Thermostabilization and thermoactivation of thermolabile enzymes by
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cDNA. Proc. Natl. Acad. Sci. U.S.A. 95 (2), 520-524 (1998)
Itoh,M., Kitsunai,T., Akiyama,J., Shibata,K., Izawa,M., Kawai,J.,
Tomaru,Y., Carninci,P., Shibata,Y., Ozawa,Y., Muramatsu,M., Okazaki
,Y. and Hayashizaki,Y.
Automated filtration-based high-throughput plasmid preparation
system. Genome Res. 9 (5), 463-470 (1999)
Carninci,P. and Hayashizaki,Y.
High-efficiency full-length cDNA cloning. Methods Enzymol. 303,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center(GSC), Yokohama Institute The Institute of Physical and Chemical Research (RIKEN) 1-7-25 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan Tel: 81-45-503-9222
                                                                                                  295 bp mRNA linear EST 29-JUN-2(BB157192 RIKEN full-length enriched, 16 days neonate thymus Mus musculus cDNA clone Al30035D04 3' similar to S59342 nuclear pore complex glycoprotein p62, mRNA sequence.
BB157192.1 GI:8813122
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/dev_stage="16 days neonate"
/lab_host="DH108"
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/db_xref="taxon:10090"
/clone="A130035D04"
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Akimura T., Arakawa T., Carninci P., Furuno M., Hanagaki T., Hayatsu N., Hiramoto K., Hiracka T., Hirozane T., Imotani K., Ishili Y., Ito M., Kawai J., Kojima T., Komon H., Kouda M., Matsuyama T., Nakamura M., Nishi K., Nomura K., Numasaki R., Okazaki Y., Okido T., Salto R., Sakai C., Sakai K., Sakazume N., Sasaki D., Sato K., Shibata K., Shinagawa A., Shiraki T., Sogabe Y., Suzuki H., Tagawa A., Takahashi F., Takaku-Akahira S., Tanaka T., Tomaru A., Toya T., Watchiki A., Yasunishi A., Muramatsu M., Hayashizaki Y.;
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Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Gemomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Vanagawa 230-0045, Japan (E-mail:genome-res@gsc.riken.go.jp, UR::http://genome-gsc.riken.go.jp/, Tel:81-45-503-9222, Fax:81-45-503-9216)
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(Rel. 69, Last updated, Version 1)
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/clone=lib="RIKEN full-length enriched mouse cDNA library"
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/tissue_type="parthenogenote"
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 347)
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                                                                                                                                                         Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata K., Itoh M., Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.; "Normalization and subtraction of cap-trapper-selected cDNAs to preparfull-length cDNA libraries for rapid discovery of new genes"; Genome Res. 10:1617-1630(2000).
                  Fukunishi Y., Shibata K., Itoh M., Carninci P., Sugahara Y.,
                                                  "Computer-based methods for the mouse full-length cDNA encyclopedia: real-time sequence clustering for construction of a nonredundant cDNA
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CDNA library was prepared and sequenced in Mouse Genome
Encyclopedia Project of Genome Exploration Research Group in Riken
Genomic Sciences Center and Genome Science Laboratory in RIKEN.
Division of Experimental Animal Research in Riken contributed to
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/sequenced_mol="cDNA to mRNA"
/organism="Mus musculus"
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27;
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Konno, H., Aizawa, K., Akahira, S., Akiyama, J., Arakawa, T., Carninci, P., Endo, T., Fukuda, S., Fukunishi, Y., Hara, A., Hayatsu, N., Hizozane, T., Hori, F., Ishii, Y., Hara, A., Hayatsu, N., Itawa, M., Kadota, K., Kagawa, T., Kai, C., Kawai, J., Kikuchi, N., Kiyosawa, H., Kojima, Y., Kondo, S., Koya, S., Kurihara, C., Kusakabe, M., Matsuyama, T., Miki, K., Mizuno, Y., Nakamura, M., Oda, H., Okazaki, Y., Ono, T., Owa, C., Saito, H., Sakai, C., Sato, K., Shbata, K., Shibata, Y., Shigemoto, Y., Shinagawa, A., Shiraki, T., Sogabe, Y., Suzuki, H., Tagawa, A., Takahashi, F., Tominaga, N., Toya, T., Tsunoda, Y., Watahiki, A., Yokota, T., Yamamura, T., Yamanaka, I., Yano, R., Yasunishi, A., Yokota, T., Yoshida, K., Yoshiki, A., Yoshino, H., M., Muramatsu, M. and Hayashizaki, Y. Shibasa, K., Yoshiki, A., Yoshido, Hayashizaki, Y., Contact: Voshihide Hayashizaki
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URL:http://genome.gsc.riken.go.jp,
carninci.p., Nishiyama, Y., Mestover, A., Itoh, M., Nagaoka, S., Sasaki, N., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y.
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Itoh, M., Kitsunai, T., Akiyama, J., Shibata, K., Izawa, M., Kawai, J., Tomaru, Y., Carninci, P., Shibata, Y., Ozawa, Y., Muramatsu, M., Okazaki, Y., and Hayshizaki, Y.
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For Institute of Physical and Chemical Research (RIKEN)
1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan Tel: 81-45-503-9222
Fax: 81-45-503-9216
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Carning, P., and Hayashizahi, Y.
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9 10898 3 US-08-487-077A-5 Sequence 5, 9, 10898 4 US-08-485-865A-5 Sequence 5, 9, 10898 4 US-09-178-115-5 Sequence 5, 9, 10898 4 US-09-178-115-5 Sequence 5, 9, 11863 1 US-08-0446-932-1 Sequence 1, 9, 11863 1 US-08-0446-932-1 Sequence 1, 9, 11863 1 US-08-0446-932-1 Sequence 1, 9, 11863 1 US-08-0448-94-1 Sequence 1, 9, 11863 1 US-08-0415-21-1 Sequence 1, 9, 11863 1 US-08-041-1 Sequence 1, 9, 1186-1 Sequence 1, 1186-1 Sequence 2, 1186-1 S	2.7 27 2 US-08-951-871-16 Sequence 15 2.7 27 3 US-09-134-132.4 Sequence 3, 2.7 27 4 US-09-134-134A-3 Sequence 3, 2.7 27 4 US-09-134-134A-3

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5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55 5.55	
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APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
APPLICANT: Rauch, Charles
TITLE OF INVENTION: Epithelium-derived T-cell Factor
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTE READBALE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC Compatible
OPERATING SYSTEM: PC-DOS/M--DOS
SOFTWARE: PAtentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/031,399
FILING DATE: 19930308
CLASSIFICATION: 530
                                                        US-09-277-716-19

US-08-858-207A-7

US-08-958-207A-7

US-09-007-119-12

US-09-123-443A-1

US-09-120-956-8

US-09-130-607-8

US-08-9439-313-8

US-08-9439-313-8

US-08-255-507-8

US-08-255-507-8

US-08-255-507-8

US-08-255-507-8

US-08-255-507-8

US-08-255-507-8

US-08-255-807A-29

US-08-255-807A-30

US-08-421-807A-30

US-08-642-807A-30

US-08-953-326-10

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US-08-953-326-10
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NAME: Launer, Charlene
REGISTRATION NUMBER: 33,035
REFERENCE/OOCKET NUMBER: 2811
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3: Immunex Corporation
51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application US/08031399
Patent No. 5552303
GENERAL INFORMATION:
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Anderson, Dirk
Eisenman, June
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 489 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: single
    CITY: Seattle
STATE: Washington
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  MOLECULE TYPE: C
HYPOTHETICAL: NC
ANTI-SENSE: NO
FEATURE:
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APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-031-399-1
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CTAAAGAGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGT 120
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                                                                     Length 489;
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APPLICANT: Grabstell, ...
APPLICANT: Adderson, Dirk
APPLICANT: Elsenman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed and Berry
STREET: 6300 Columbia Center, 701 Fifth Avenue
                                                                                              Indels
                                                                 Score 489; DB 1; I
Pred. No. 3.7e-235;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
SOFTWARE: PATENTION DATA:
APPLICATION NUMBER: US/08/393,305
FILING DATE: 22-FEB-1995
                                                                                              Mismatches
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Patent No. 5574138
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100.0%;
                                                                                          Matches 489; Conservative
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COMPUTER READABLE FORM:
                                                                               Similarity
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; NAME/KEY:
; LOCATION:
US-08-031-399-1
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Best Local 9
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Best Local Similarity 100.0%; Pred. No. 3.7e-235;
Matches 489; Conservative 0; Mismatches 0;
                                                                                                                                                              Version #1.25
                 6300 Columbia Center, 701 Fifth Avenue
                                                                                        COMPUTER SEADABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Comparatible
COMPUTER: TBM PC COMPATIBLE
COMPUTER: TBM PC COMPATIBLE
COMPUTER: TBM PC COMPATIBLE
COMPUTER: TBM PC COMPATIBLE
COMPUTER: PATENTIAL COMPATIBLE
COMPARE: PATENTIAL RELEASE #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/726,817
FILING DATE: 04-0CT-1996
CLASSIFICATION: 435
PRICA APPLICATION 1435
PRILING DATE: 22-FEB-1995
ATTORNEY AGENT INFORMATION:
NAME: MCMASTERS DAVIG D.
REFERENCE/DOCKET NUMBER: 480052.409C2
TELECOMMUNICATION NUMBER: 480052.409C2
TELECOMMUNICATION NUMBER: 480052.409C3
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
   Seed and Berry
                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                               STATE: Washington
COUNTRY: USA
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                  STREET: 6300 CCITY: Seattle
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; LOCATION:
US-08-726-817-4
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APPLICANT: Anderson, Dirk
APPLICANT: Eisenman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: BPITHELIUM-DERIVED T-CELL FACTOR
WUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                            100.0%; Score 489; DB 1; I
100.0%; Pred. No. 3.7e-235;
ive 0; Mismatches 0;
                                                                  480052.409C2
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: MCMASters, David D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 48005
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-622-4900
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-726-817-4
; Sequence 4, Application US/08726817
; Patent No. 5707616
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                          Best Local Similarity 100.
Matches 489; Conservative
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; LOCATION:
US-08-393-305-4
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241 CCCAGTTGCAAGGTAACAGCAATGAAGTGCTTTCTCTTGGAGTTGCAAGTTATTTCACAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Word for Windows 95, 7.0
SOFTWARE: Patentin Release #1.0, Version #1.25
APPLICATION DATA:
APPLICATION NUMBER: US/08/392,317B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Paxton, Raymond
APPLICANT: Pettit, Dean
TITLE OF INVENTION: Antagonists of IL-15
NUMBER OF SEQUENCES: 10
CORRESSEDNIBENCE ADDRESS:
ADDRESSEE: Immunex Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: Immunex Corporation STREET: 51 University Street CITY: Scattle STATE: Washington COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application US/08392317B Patent No. 5795966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: Malaska, Stephen L.
REGISTRATION NUMBER: 32,655
REFERENCE/DOCKET NUMBER: 2831
TELECOMMUNICATION INFORMATION:
TELEHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
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CLASSIFICATION: 536
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Best Local Similarity
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US-08-392-317B-1
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APPLICANT: Elsemman, June
APPLICANT: Elsemman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: Epithellum-derived T-cell Factor
CORRESPONDENCES: 12
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/504,042
FILING DATE: 19-JUL-1995
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/031,399
FILING DATE: 08-MAR-1993
ATTORNEY/AGENT INFORMATION:
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100.0%; Score 489; DB 1; L
Best Local Similarity 100.0%; Pred. No. 3.7e-235;
Matches 489; Conservative 0; Mismatches 0;
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51 University Street
                                                                                                       Sequence 1, Application US/08504042
Patent No. 5747024
GENEBLI INFORMATION:
APPLICANT: Grabstein, Kenneth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Launer, Charlene
REGISTRATION NUMBER: 33,035
REFERENCE,CDOCKET NUMBER: 2811
TELECOMMUNICATION INFORMATION:
TELECHONE: 205-587-0430
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
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Anderson, Dirk
Elsenman, June
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linear
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Best Local Similarity
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MOLECULE TYPE: CD
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US-08-504-042-1
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                                                                                      US-08-504-042-1
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REFERENCE/DOCKET NUMBER: 480
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-622-4900
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                      Matches 489; Conservative
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STATE: Washington
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Best Local Similarity
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    Gaps
                             GAGTCCGGAGATACAGATATTCATGATACAGTAGAAAATCTTATCATCCTAGCAAACAAC
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  Indels
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APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Elsenman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
ITILE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESSE:
ADDRESSEE: Seed and Berry
STREET: 6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Patentin Release #1.0, Version #1.25
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/725,969
FILING DATE: 04-0CT-1996
CLASSIFICATION 435
PROOR APPLICATION NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATTON NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATTON NUMBER: 33,963
REGISTRATION NUMBER: 33,963
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  Mismatches
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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Patent No. 5892001
GENERAL INFORMATION:
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  Conservative
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STATE: Washington
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    Matches
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241 CCCAGTTGCAAGGTAACAGCAATGAAGTGCTTTCTTTGGAGTTGCAAGTTATTTCACAT 300
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            Length 489;
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; Sequence 5.985262
; GENERAL INFORMATION:
    APPLICANT: Grabstein, Kenneth
    APPLICANT: Breeman, June
    APPLICANT: Elsenman, June
    APPLICANT: Fung, Victor
    APPLICANT: Faug, Victo
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STREET: 6300 Columbia Center, 701 Fifth Avenue
            Score 489; DB 2; I
Pred. No. 3.7e-235;
100.0%; Score 489; D. 100.0%; Pred. No. 3.7 tive 0; Mismatches
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                                               SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA: PAPLICATION NUMBER: US/08/794,524 FILING DATE: 03-FEB-1997 CLASSIFICATION: 435
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                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US 08/393,305
FILLING DATE: 22-FEB-1995
ATTORNEY/AGENT INFORMATION:
NAME: MCMBSTERS, David D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 480052.409C2
TELECOMMUNICATION INFORMATION:
TELEFHONE: 206-622-4900
INFORMATION FOR SEC ID NO: 4:
SEQUENCE CHARACTERISTICS:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                      LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                        1..489
                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
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; LOCATION:
US-08-794-524-4
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241 CCCAGTIGCAAGGTAACAGCAAIGAAGTGCTTTCTCTTGGAGTTGCAAGTTATTTCACAT 300
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                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Word for Windows 95, 7.0
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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Best Local Similarity 100.0%; Pred. No. 3.7e-235;
Matches 489; Conservative 0; Mismatches 0;
                                                                         APPLICANT: Grabstein, Kenneth
APPLICANT: Paxton, Raymond
APPLICANT: Pettit, Dean
TITLE OF INVENTION: Antagonists of IL-15
GORRESPONDENCE: 10
ADDRESSEE: Immunex Corporation
                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/09/134,132 FILING DATE: US/SIFICATION: PRIOR APPLICATION: APPLICATION NUMBER: US/08/392,317 APPLICATION NUMBER: US/08/392,317
                                                                                                                                                                                    1: Immunex Corporation
51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ALICHARA, TOWARS, ALEPHON L.
REGISTRATION NUMBER: 32,655
REFERENCE/DOCKET NUMBER: 2831
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEO ID NO: 1:
SEQUENCE CHARACTERSTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
US-09-134-132-1
; Sequence 1, Application US/09134132
; Patent No. 6013480
; GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                        ZIP: 98101
COMPUTER READABLE FORM:
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STATE: Washington
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NAME: Malaska, Stephen L. REGISTRATION NUMBER: 32,655 REFERENCE/DOCKET NUMBER: 28
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MEDIUM TYPE: Floppy
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STATE: Washington
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SOFTWARE: PatentI
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                                                                                                                                             361 ATCTTGTCTTCTAATGGGAATATAACAGAATCTGGATGCAAAGAATGTGGGAACTAGAG 420
                                                                                      GAGTCCGGAGATACAGATATTCATGATACAGTAGAAAATCTTATCATCCTAGCAAACAAC 360
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Word for Windows 95, 7.0
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/134,134A
                                                                                                                                                                                                                                                                                     Sequence 1, Application US/09134134A
Patent No. 6165466
GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Paxton, Raymond
TITLE OF INVENTION: Antagonists of IL-15
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Immunex Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
NAME: MALASKA, STEPHEN L.
REGISTRATION NUMBER: 32,655
REFERENCE/DOCKET NUMBER: 2831
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-587-6430
INFORMATION FOR SEQ ID NO: 1:
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APPLICATION NUMBER: 08/392,317
FILING DATE:
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51 University Street
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TYPE: nucleic acid
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STREET: 51 C.
CITY: Seattle
CITY: Washington
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MOLECULE TYPE: CD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE
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US-09-134-134A-1
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241 CCCAGTTGCAAGGTAACAGCAATGAAGTGCTTTCTCTTGGAGTTGCAAGTTATTTCACAT 300
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IBM PC Compatible
SYSTEM: Word for Windows 95, 7.0
PatentIn Release #1.0, Version #1.25
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Patent No. 6168783
GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Paxton, Raymond
APPLICANT: Pettit, Dean
TITLE OF INVENTION: Antagonists of IL-15
WHABER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/134,456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Immunex Corporation
STREET: 51 University Street
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APPLICATION NUMBER: 08/392,317
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TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
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COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Word for Windows 95, 7.0
SOFTWARE: PatentIn Release #1.0, Version #1.25
                              CURRENT APPLICATION DATA:

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/196,427

FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/392,317

FILING DATE:
ATORNEY, AGENT INFORMATION:
NAME: Malaska, Stephen L.
REGISTRATION NUMBER: 2831

FELENGOMUNICATION INFORMATION:
TELECOMMUNICATION NUMBER: 2831

TELECOMMUNICATION INFORMATION:
SEQUENCE CHARACTERISTICS:
LENGTH 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear MOLECULE TYPE: CDNA
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                                                                                                                                                                                                                                                                                                                                                                                                    ; LOCATION:
US-09-196-427-1
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                                                                                                                                                                                            Length 489
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                                                                                                                                                                                      100.0%; Score 489; DB 4; I
100.0%; Pred. No. 3.7e-235;
Live 0; Mismatches 0;
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Patent No. 617079
GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Paxton, Raymond
APPLICANT: Pettit, Dean
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
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51 University Street
LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 98101
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                      Best Local Similarity 100.
Matches 489; Conservative
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STATE: Washington
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                                                                                      ANTI-SENSE: NO FEATURE:
                                                                                                                 ; NAME/KEY:
; LOCATION:
US-09-134-456-1
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STREET: 51
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         Length 489;
                                       Indels
Query Match 100.0%; Score 489; DB 4; I Best Local Similarity 100.0%; Pred. No. 3.7e-235; Matches 489; Conservative 0; Mismatches 0;
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61 CTAAAGAGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGT 120
121 GAAAAAATATTAAAGAATTTTTGCAGAGTTTTGTACATATTGTCCAAATGTTCATCAAC 480
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100.0%; Pred. No. 3.7e-235;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/03793
                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Eisenman, June
APPLICANT: Eisenman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: Interleukin-15
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                       PCT-US94-03793-1; Sequence 1, Application PC/TUS9403793; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Immunex Corporation
STREET: 51 University Street
CITY: Seattle
STATE: Washington
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NAME: Launer, Charlene
REGISTRATION NUMBER: 33,035
REFERENCE/DOCKET NUMBER: 2811
TELECOMUNICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 98101
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FEATURE:
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Best Local Simi
Matches 489;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
LOCATION:
PCT-US94-03793-1
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                                                                                     APPLICANT: Anderson, Dirk
APPLICANT: Elsenman, June
APPLICANT: Fund, Victor
APPLICANT: Fund, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR
CORRESPONDENCES: 15
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                             ZIP: 98104

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/189,193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 489; DB 4; I
100.0%; Pred. No. 3.7e-235;
ive 0; Mismatches 0;
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6300 Columbia Center, 701 Fifth Avenue
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATTORNEY/AGENT INFORMATION:
NAME: MCMASters, David D.
REGISTRATION NUMBER: 480052.409C2
TELEPHONE: 206-622-4900
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDENNESS: single
               Sequence 4, Application US/09189193
Patent No. 6184359
GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
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Matches 489; Conservative
                                                                                                                                                                                                                                                        CITY: Seattle
STATE: Washington
COUNTRY: USA
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                                                                                                                                                                                                                      ADDRESSEE:
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; LOCATION:
US-09-189-193-4
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 US-09-189-193-4
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Best Local 9
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                  ; LOCATION:
US-08-393-305-13
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                                     GCAGGGCTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAATT 180
                                                  361 ATCTTGTCTTCTAATGGGAATATAACAGAATCTGGATGCAAAGAATGTGAGGAACTAGAG 420
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                                                                                                                                                                                    GAGTCCGGAGATACAGATATTCATGATACAGTAGAAAATCTTATCATCCTAGCAAACAAC 360
                                                                                    181 GAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACAGAAAGTGATGTTCAC
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APPLICANT: Elsenman, June
APPLICANT: Euro, Victor
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: BPITHELIUM-DERIVED T-CELL FACTOR
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 13, Application US/08393305
Patent No. 5574138
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: Seed and Berry
STREET: 6300 Columbia Center,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: MCMASLEFS, DAVIG D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 48000
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-622-4900
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARATERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Eisenman, June
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TYPE: nucleic acid
STRANDEDNESS: single
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: Washington
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TOPOLOGY: lir
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STATE:
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                                                    Length 345;
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APPLICANT: Anderson, Dirk
APPLICANT: Elsenman, June
APPLICANT: Elsenman, June
APPLICANT: Elsenman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVEWION: EPITHELIUM-DERIVED T-CELL FACTOR
NUMBER OF SEQUENCES: 15
CORRESPONDENCES: 15
CORRESPONDENCES: Seed and Berry
STREET: 6300 Columbia Center, 701 Fifth Avenue
CITY: Seattle
STATE: Washington
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             445 CAGAGTTTTGTACATATTGTCCAAATGTTCATCAACACTTCTTGA 489
Score 345; DB 1; Le
Pred. No. 3e-163;
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COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
FILING DATE: 04-OCT-1996
CLASSIFICATION: 435
                                    10.6%; Score 345; DB ilarity 100.0%; Pred. No. 3e-Conservative 0; Mismatches
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-622-4900
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATTORNEY AGENT INFORMATION:
NAME: MCMASters, David D.
REGISTRATION NUMBER: 33,90052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 13, Application US/08726817
Patent No. 5707616
GENERAL INFORMATION:
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                                         Query Match
Best Local Similarity
Matches 345; Conserv
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/794,524
FILING DATE: 03-FEB-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                      TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-622-4900
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                     LENGTH: 345 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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STATE: Washington
                                                                                                                                                      TOPOLOGY: linear FEATURE:
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Matches 345; Conserv
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; LOCATION:
US-08-725-969-13
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                                                                                                                                                                                                                                                                     Length 345;
                                                                                                                                                                                  Core 345; L. Pred. No. 3e-163; Pred. no. 3e-163;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 13, Application US/08725969
Fatent No. 5892001
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Grabatein, Kenneth
APPLICANT: Biscenman, June
APPLICANT: Rauch, Charles
TITLE OF INVENTION: EPTTHELIUM-DERIVED T-CELL FACTOR
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          445 CAGAGITITGTACATATIGICCAAAIGTICATCAACACTICTIGA 489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301 CAGAGTTTTGTACATATTGTCCAAATGTTCATCAACACTTCTTGA 345
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
FILING DATE: US/08/725,969
FILING DATE: U4-OCT-1996
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                 Query Match 70.6%; Score 345; DB Best Local Similarity 100.0%; Pred. No. 3e-Matches 345; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRICE APPLICATION DATA:
PRICE APPLICATION DATA:
APPLICATION NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: McMasters, David D. REGISTRATION NUMBER: 33,963
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 98104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Seattle
STATE: Washington
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
STREET: 63
                                                                                                 ; NAME/KEY:
; LOCATION:
US-08-726-817-13
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181 GATACAGTAGAAAATCTTATCATCCTAGCAAACAACATCTTGTCTTATATGGGAATATA 240
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                                                 Gaps
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  Length 345;
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Patent No. 5985262

GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Grabstein, June
APPLICANT: Fung, Victor
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
ITITLE OF INVENTION: EPITHBLIUM-DERIVED T-CELL FACTOR
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5: Seed and Berry
6300 Columbia Center, 701 Fifth Avenue
70.6%; Score 345; DB 2; ilarity 100.0%; Pred. No. 3e-163; Conservative 0; Mismatches 0
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205 ATTGATGCTACTTTATATACAGAAAGTGATGTTCACCCCAGTTGCAAGGTAACAGCAATG 264
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; Sequence 4, Application US/08031399
; Sequence 4, Application US/08031399
; Patent No. 552203
; GENERAL INFORMATION:
; APPLICANT: Grabstein, Kenneth
; APPLICANT: Anderson, Dirk
; APPLICANT: Fung, Victor
; APPLICANT: Fung, Victor
; APPLICANT: Rauch, Charles
; TITLE OF INVENTION: Epithellum-derived T-cell Factor
; NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSEE: Immunex Corporation
STREET: 51 University Street
CITY: Seattle
STATE: Washington
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301 CAGAGTTTTGTACATATTGTCCAAATGTTCATCAACACTTCTTGA 345
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                                                        CLASSIFICATION:
PRIOR APPLICATION:
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATTORNEY/AGENT INFORMATION:
NAME: MCMASters, David D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 480052.409C2
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-622-4900
INFORMATION FOR SEQ ID NO: 13:
                    APPLICATION NUMBER: US/09/189,193 FILING DATE:
                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 345 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
          CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY:
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US-09-189-193-13
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| Sequence 13, Application US/09189193
| GENERAL INFORMATION:
| APPLICANT: Grabstein, Kenneth
| APPLICANT: Anderson, Dirk
| APPLICANT: Fung, Victor
| APPLICANT: Rauch, Charles
| TITLE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR
| NUMBER OF SEQUENCES: 15
| CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        445 CAGAGTTTTGTACATATTGTCCAAATGTTCATCAACACTTCTTGA 489
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COMPOTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5: Seed and Berry
6300 Columbia Center, 701 Fifth Avenue
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100.0%; Pred. No. 3e-163;
iive 0; Mismatches 0;
APPLICATION NUMBER: US 08/393,305
FTLING DATE: 22-FEB-1995
ATTORNEY/AGENT INFORMATION:
NAME: MCMASTERS, David D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 480052.409C2
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
SEQUENCE CHARACTERISTICS:
LENGTH: 345 base pairs
TYPE: nucleic acid
STRANDENNESS: SINGLE
                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 345; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
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STATE: Washington
                                                                                                                                                                                                                                                           TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
                                                                                                                                                                                                                                                                                                  NAME/KEY: CDS
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STREET: 63
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US-08-794-524-13
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                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
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127 CTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAAATTGAAGAT 186
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SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/535,733
                                                                                                                                                                                                                                                                                                                                                                                                             21.9%; Score 107; DB 1; 99.4%; Pred. No. 2.2e-44;
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; Patent No. 5660824
; GENERAL INFORMATION:
    APPLICANT: Quinn, LeBris
; APPLICANT: Grabstein, Kenneth
    TITLE OF INVENTION: Muscle-Trophic Factor
    NUMBER OF SEQUENCES: 2
    CORRESPONDENCE ADDRESS:
    ADDRESSEE: Immunex Corporation
    STREET: 51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                       480052.409C2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: MALBSKA, Stephen L.
REGISTRATION NUMBER: 32,655
REFRENCE/DOCKET NUMBER: 2833
TELECHMUNICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 1:
                 ATTORNEY/AGENT INFORMATION:
NAME: MCMASters, David D.
REGISTRATION NUMBER: 33,062
REFERENCE/DOCKET NUMBER: 4800:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-622-4900
INFORMATION FOR SED ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
ZIP: 98101
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: System 7,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
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CITY: Seattle
STATE: Washington
                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                      NAME/KEY:
LOCATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-393-305-1

Sequence 1, Application US/08393305

Patent No. S574138

GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Elsemman, June
APPLICANT: Elsemman, June
APPLICANT: Rauch, Charles
TITLE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed and Berry
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
SOFTWARE: PatentIn Release #1.0, version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/031,399
FILING DATE: 19930308
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Lanner. Charlene
REGISTRATION NUMBER: 2811
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: single
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COMPUTER: IBM PC compatible
COMPATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/393,305
FILING DATE: 22-FEB-1995
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STREET: 6300 Columbia Center, 701 Fifth Avenue
CITY: Seattle
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CLASSIFICATION: 424
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STATE: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; NAME/KEY: CDS
; LOCATION: 1..489
US-08-031-399-4
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US-08-504-042-4
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US-08-504-042-4
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                                                                                                                                                                             Gaps
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                                                                                                                                 21.9%; Score 107; DB 1; Length 489; 99.4%; Pred. No. 2.2e-44;
                                                                                                                                                                         1; Indels
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APPLICANT: Anderson, Dirk
APPLICANT: Eisenman, June
APPLICANT: Eisenman, June
APPLICANT: Rauch, Charles
TITLE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed and Berry
STREET: 6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER FRADABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/726,817
FILING DATE: 04-OCT-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
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                                                                                                                                                                         0; Mismatches
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Patent No. 5707616
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: MCMASCETS, DAVID D.
REGISTRATION UNDRER: 33,963
REFERENCE/DOCKET NUMBER: 4800
TELECOMMUNICATION INFORMATION:
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                     Best_Local Similarity 99.4 Matches 157; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: Seattle
STATE: Washington
MOLECULE TYPE: CDNA
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                                 ; NAME/KEY:
; LOCATION:
US-08-535-733-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; NAME/KEY:
; LOCATION:
US-08-726-817-1
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US-08-726-817-1
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                                             Gaps
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    Length 489;
Score 107; DB 1; Length 48
Pred. No. 2.2e-44;
0; Mismatches 1; Indels
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SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/504,042
FILING DATE: 19-JUL-1995
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/031,399
FILING DATE: 08 MAR-1993
ATTORNEY/AGENT INFORMATION:
NAME: Launer, Charlene
NAME: Launer, Charlene
NAME: Launer, Charlene
NAME: Launer, Charlene
NEGISTERNICATION NUMBER: 2811
TELECOMMUNICATION 11
TELECOMMUNICATION 14:
SECIENTE AND NUMBER: 206-587-043
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
STRANBEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Epithelium-derived T-cell Factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21.9%; Score 107; DB 1; Lalarity 99.4%; Pred. No. 2.2e-44; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                   187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E: Immunex Corporation
51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                     GEMERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Eisenman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: Epithellum-c
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                Sequence 4, Application US/08504042 Patent No. 5747024
    21.9%;
99.4%;
Query Match
Best Local Similarity 99.4*
Matches 157; Conservative
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CITY: Seattle
STATE: Washington
COUNTRY: USA
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Best Local Similarity
Matches 157; Conserva
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ZIP: 98104
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US-08-725-969-1
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US-08-794-524-1
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                              67 AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
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67 AGTCATTITCIAACTGAAGCTGGCATTCATGTCTTTAGGGCTGTTTCAGTGCAGGG 126
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/392,317B
                                                                                                                       187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
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                                                                                                     187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
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                                                                                                                                                                                                                    Sequence 2, Application US/08392317B
Patent No. 5795966
GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Paxton, Raymond
APPLICANT: Petiti, Dean
TITLE OF INVENTION: Antagonists of IL-15
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: Immunex Corporation
STREET: 51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILLING DATE:

FILLING DATE:

ATONREY AGENT INFORMATION:

NAME: Malaska, Stephen L.

REGISTRATION NUMBER: 32,655

REFERENCE/POCKET NUMBER: 2831

TELEPHONE: 206-587-0430

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 489 base pairs

TYPE: nucleic acid

STRANDEDNESS: single
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Word for W
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Matches 157; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Seattle
STATE: Washington
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US-08-392-317B-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 21.9%; Score 107; DB 2; Length 48 Best Local Similarity 99.4%; Pred. No. 2.2e-44; Matches 157; Conservative 0; Mismatches 1; Indels
                                                                         APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Eisenman, June
APPLICANT: Euch Victor
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: BPITHELIUM-DERIVED T-CELL FACTOR
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/725,969
FILING DATE: 04-OCT-1996
                                                                                                                                                                                                                                                                                     ADDRESSEE: Seed and Berry
STREET: 6300 Columbia Center, 701 Fifth Avenue
CITY: Seattle
STATE: Washington
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 480052.409C2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-622-4900
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 04-OCT-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATTORNEY/AGENT INFORMATION:
NAME: MCMASTERS, David D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1, Application US/08794524
Patent No. 5985262
GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
Sequence 1, Application US/08725969 Patent No. 5892001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
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                                                   GENERAL INFORMATION:
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127 CTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGAT 186
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 21.9%; Score 107; DB 3; Length 48 Best Local Similarity 99.4%; Pred. No. 2.2e-44; Matches 157; Conservative 0; Mismatches 1; Indels
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APPLICANT: Strom, Terry B.
APPLICANT: Strom, Terry B.
APPLICANT: Maslinski, Wlodzimierz
APPLICANT: Maslinski, Wlodzimierz
TITLE OF INVENTION: ANTAGONISTS OF INTERLEUKIN-15
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
                                                                                                                                                          OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION UNBER: US/08/842,947
FILING DATE: 25-APR-1997
CLASSIFICATION: 432
PRIOR APPLICATION DATA:
APPLICATION UNBER: 60/016,634
FILING DATE: 26-APR-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01948/039001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Freeman, John W.
REGISTRATION NUMBER: 29,066
REFRENCE/DOCKET NUMBER: 01946
TELECOMMUNICATION INFORMATION:
TELEPAN: 617-542-507
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-842-947-7; Sequence 7, Application US/08842947; Patent No. 6001973
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OPERATING SYSTEM: Windows95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Boston
STATE: MA
COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGIH: 489 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ) NAME/KEY: Coding E
; LOCATION: 1...486
; OTHER INFORMATION:
US-08-842-947-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear FEATURE:
                                        02110-2804
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21.9%; Score 107; DB 2; Length 489; 99.4%; Pred. No. 2.2e-44; tive 0; Mismatches 1; Indels
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed and Berry
STREET: 6300 Columbia Center, 701 Fifth Avenue
CITY: Seatile
STATE: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-042-947-5

Sequence 5, Application US/08642947

Fatent No. 6001379;

BAPLICANT: Strom, Terry B.

APPLICANT: MASSILISKI, Wlodzimierz

APPLICANT: MASSILISKI, Wlodzimierz

TITLE OF INVENTION:

CORRESPONDENCES: 8

CORRESPOND
                                                                                                                                                                                                                                                                                                                                                                CAMPUTER PRIDABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/794,524
FILLING DATE: 03-FEE-1997
CLASSIFICATION 13-FEE-1997
FILLNG RAPLICATION NUMBER: US/08/393,305
FILING DATE: 22-FEE-1995
ATPONNEY/AGENT INFORMATION:
NAME: MCMASLERS, DAVIG D:
REGISTRATION NUMBER: 33,963
RECISTRATION NUMBER: 33,963
RECISTRATION NUMBER: 33,963
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNES: Single
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Best Local Similarity
Matches 157; Conserv
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STREET: 42.
TV: Boston
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US-08-794-524-1
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CTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGAT 186
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Word for Windows 95, 7.0
SOFWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/134,134A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
21.9%; Score 107; DB 3;
Best Local Similarity 99.4%; Pred. No. 2.2e-44;
Matches 157; Conservative 0; Mismatches 1
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Patent No. 6165466
GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Paxton, Raymond
TITLE OF INVENTION: Antagonists of IL-15
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET: 51 University Street Carry: Seattle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/392,317
FILING DATE:
                                  REGISTRATION NUMBER: 32,655
REFERENCE/OCKET NUMBER: 2831
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 2:
SEQUIENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
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TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Malaska, Stephen L. REGISTRATION NUMBER: 32,6
REFERENCE/DOCKET NUMBER:
          Malaska, Stephen L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
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STATE: Washington
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; LOCATION:
US-09-134-132-2
                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY:
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Pred. No. 2.2e-44;
0; Mismatches 1; Indels
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Word for Windows 95, 7.0
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/134,132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                187 CTTATTCAATCTATGCATATTGATGCTACTTTATATC 224
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18-09-134-132-2
18-09-134-132-2
18-09-134-132-2
18-09-134-132-2
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18-09-134-132-2
18-09-134-80-134-80-132-2
18-09-134-80-132-2
18-09-134-80-132-2
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                                                                                      PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: 60/016,634
FILING DATE: 26-APR-1996
ATTORNEY/AGENT INFORMATION:
NAME: Freeman, John W.
REGISTRATION NUMBER: 29,066
REFERENCE/POCKET NUMBER: 01948/039001
TELECOMUNICATION INFORMATION:
TELECOMUNICATION INFORMATION:
TELEFAX: 617-542-8906
APPLICATION NUMBER: US/08/842,947 FILING DATE: 25-APR-1997 CLASSIFICATION: 432
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APPLICATION NUMBER: US/08/392,317
                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: 617-542-8906
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: Coding Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 21.9%;
Best Local Similarity 99.4%;
Matches 157; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; LOCATION: 1...486
; OTHER INFORMATION:
US-08-842-947-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear FEATURE:
                                  FILING DATE: 25 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
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127 CTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAAATTGAAGAT 186
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                                              Length 489;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Word for Windows 95, 7.0
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURREMY APPLICATION DATA:
APPLICATION NUMBER: US/09/196,427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ouery Match 21.9%; Score 107; DB 4; I
Best Local Similarity 99.4%; Pred. No. 2.2e-44;
Matches 157; Conservative 0; Mismatches 1;
                                          Score 107; DB 4;
Pred. No. 2.2e-44;
0; Mismatches 1.
                                                                                                                                                                                                                                                                  187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
                                                                                                                                                                                                                                                                                        187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Grabstein, Renneth
APPLICANT: Paxton, Raymond
APPLICANT: Pettit, Dean
TITLE OF INVENTION: Antagonists of IL-15
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Immunex Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
NAME: Malaska, Stephen L.
REGISTRATION NUMBER: 32,655
REFERENCE/DOCKET NUMBER: 2831
TELECOMMUICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E: Immunex Corporation
51 University Street
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/392,317
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                               US-09-196-427-2
; Sequence 2, Application US/09196427
; Patent No. 6177079
                                          21.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
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CITY: Seattle
STATE: Washington
COUNTRY: USA
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                                          Query Match
Best Local Similarity
Matches 157; Conserv
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; LOCATION:
US-09-196-427-2
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                                                                                                                                                                                       Score 107; DB 4; Length 489;
Pred. No. 2.2e-44;
0; Mismatches 1; Indels
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Word for Windows 95, 7.0
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/134,456
                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Grabstein, Kenneth
APPLICANT: Paxton, Raymond
APPLICANT: Pettit, Dean
ITILE OF INVENTION: Antagonists of IL-15
NUMBER OF SEQUENCES: 10
ADDRESSEE: Immunex Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: 2831
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEE: Immunex Corporation
: 51 University Street
Seattle
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APPLICATION NUMBER: 08/392,317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2, Application US/09134456
Patent No. 6168783
GENERAL INFORMATION:
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NAME: Malaska, Stephen L.
REGISTRATION NUMBER: 32,655
                                                                                                                                                                                         21.9%;
                                                                                                                                                                                                       Best Local Similarity 99.4
Matches 157; Conservative
                   single
     nucleic acid
TYPE: nucleic acic
STRANDEDNESS: sing
TOPOLOGY: linear
MOLECULE TYPE: CDNA
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                                                                                            NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98101
                                                                                                              ; LOCATION:
US-09-134-134A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; NAME/KEY:
; LOCATION:
US-09-134-456-2
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LOCATION:
PCT-US94-03793-4
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67 AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
                                      127 CTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAATTGAAGAT 186
                                                               67 AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
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Pred. No. 2.2e-44;
0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                               APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Anderson, June
APPLICANT: Eisenman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF TWENTION: EPITHELIUM-DERIVED T-CELL FACTOR
NUMBER OF SEQUENCES: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed and Berry
STREET: 6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
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PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE: 22-FEB-1955
ATTORNEY/AGENT INFORMATION:
NAME: MCMAETER, DAVIG D.
RECISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 480052.409C
TELECOMUNICATION INFORMATION:
TERCOMUNICATION INFORMATION:
TENCOMUNICATION:
SEQUIENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/09/189,193 FILING DATE:
                                                                                                                                                                                                                                                        Sequence 1, Application US/09189193
Patent No. 6184359
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 98104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 21.9%;
Best Local Similarity 99.4%;
Matches 157; Conservative
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STATE: Washington
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear
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US-09-189-193-1
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                                                                                                                                                                                                                                                                              COMPUTER TREADABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPPERTING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 107; DB 5; L
Pred. No. 2.2e-44; .
0; Mismatches 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1, Application PC/TUS9606423
GENERAL INFORMATION:
APPLICANT: Immunex Corporation
TITLE OF INVENTION: Muscle Trophic Factor
                                                   APPLICANT: Anderson, Dirk
APPLICANT: Eisenman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: Interleukin-15
CORRESPONDENCE 312
CORRESPONDENCE 312
Sequence 4, Application PC/TUS9403793
GENERAL INFORMATION:
APPLICANT: Grabstein Kenneth
                                                                                                                                                           STREET: Immunex Corporation STREET: 51 University Street CITY: Seattle STATE: Washington CONNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Launer, Charlene
REGISTRATION NUMBER: 33,035
REFRENCE/DOCKET NUMBER: 2811
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
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99.4%;
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NAME: Launer, Charlene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 99.44
Matches 157; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: linear MOLECULE TYPE: CDNA
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67 AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          127 CTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGAT 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INCORNATION:
APPLICANT: C. Frank Bennett
APPLICANT: C. Frank Bennett
APPLICANT: Lex M. COWSETL
TITLE OF INVENTION: ANTISENSE MODULATION OF Interleukin-15 EXPRESSION
FILE REFERENCE: RTS-0022
CURRENT APPLICATION NUMBER: US/09/200,141
CURRENT FILING DATE: 1998-11-25
NUMBER OF SEQ ID NOS: 47
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           CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/962,503
FILING DATE: 31-0CT-1997
ATTORNEY/ACENT INFORMATION:
NAME: Haile, Ph.D., Lisa A
RECISTRATION NUMBER: 38,347
RECENENCE/DOCKET NUMBER: 39,326/002001
TELEFONE: 619/678-5070
TELEFONE: 619/678-5099
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 1202 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
21.9%; Score 107; DB 3;
Best Local Similarity 99.4%; Pred. No. 2.2e-44;
Matches 157; Conservative 0; Mismatches 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-200-141-1
; Sequence 1, Application US/09200141
; Patent No. 5985663
OPERATING SYSTEM: Windows 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; NAME/KEY: CDS
; LOCATION: (519)..(926)
US-09-200-141-1
                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: DNA
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Matches 95; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        67 AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 21.9%; Score 107; DB 5; Length 489; Best Local Similarity 99.4%; Pred. No. 2.2e-44; Matches 157; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: Veerapanent, Dange
APPLICANT: Wearapanent, Dange
APPLICANT: Hananaka, Shoji
APPLICANT: No. 60811/2awa, Iwao
TITLE OF INVENTION: RIBOZYMES TARGETED TO IL-15 MRNA
NUMBER OF SEQUENCES:
ADDRESSEE: Fish & Richardson P.C.
                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macincosh
OPERATING SYSTEM: System 7, Word 6.0
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US96/06423
FILLING DATE: 07 May 1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ISEE: Fish & Richardson P.C. 4225 Executive Square, Suite 1400 La Jolla
                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY AGENT INFORMATION:
NAME: Malaska, Stephen L.
REGISTRATION NUMBER: 32,655
REFERENCE/DOCKET NUMBER: 2833-WO
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 11, Application US/08962503 Patent No. 6087172
                                          ADDRESSEE: Immunex Corporation
STREET: 51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM COMPATIBLE
                                                                                                                                                                                 COMPUTER READABLE FORM:
                       CORRESPONDENCE ADDRESS:
  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: CDNA
                                                                                                           Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1..489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                         FILING DATE: 0'
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; NAME/KEY: CDS
; LOCATION: 1..4
PCT-US96-06423-1
                                                                                    Seattle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           92037
                                                                                                                                                          ZIP: 98101
                                                                                    CITY: See
STATE: Wa
COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-962-503-11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET:
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Best Local S
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145 AACTGGGTGAATGTAATAAGTGATTTGAAAAATTGAAGATCTTATTCAATCTATGCAT 204
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; Patent No. 5892001
; GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Eisenman, June
APPLICANT: Rauch, Charles
; TITLE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR
NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
                                                                      COUNTKI.

ZIP: 98104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
COFTWARE: PatentIn Release #1.0, Version #1.25
"CAMPUTER: PatentIn Release #1.0, Version #1.25
"CAMPUTER: PatentIn Release #1.0, Version #1.25
E: Seed and Berry 6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Seed and Berry
STREET: 6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                    SURFAMEL: PATCHIAN MATES #1.0, Version CURREWY APPLICATION DATA:
APPLICATION NUMBER: US/08/726,817
FILING DATE: 04-0CT-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATTORNEY/AGENT INFORMATION:
NAME: MCMASters, David D.
REGISTRATION NUMBER: 480052.409C2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-622-4900
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 345 base pairs
TYPE: nucleic acid
STRANDEDNESS: SINGLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 16.4%; Score 80; DB Best Local Similarity 100.0%; Pred. No. 6.7 Matches 80; Conservative 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 6300 Columb
CITY: Seattle
STATE: Washington
COUNTRY: USA
                                       Seattle
Washington
  ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
FEATURE:
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; LOCATION:
US-08-726-817-12
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16.4%; Score 80; DB 1; Length 345;
Best Local Similarity 100.0%; Pred. No. 6.7e-31;
Matches 80; Conservative 0; Mismatches 0; Indels
                                                                                                          APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Eisenman, June
APPLICANT: Eisenman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER IBM PC compatible
COMPUTER: IBM PC compatible
SPELICATION NUMBER: US/08/393,305
CLASSIFICATION NUMBER: US/08/393,305
CLASSIFICATION NUMBER: 33,963
ATTORNEY/AGENT INFORMATION:
CLASSIFICATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 13,963
REFERENCE/COMPUNICATION INFORMATION:
TELEPHONE: 206-622-4900
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 345 base pairs
TYPE: NUMLEH: Cacid
STRANDENESS: Single
TOWNICAT: Ilnear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E: Seed and Berry 6300 Columbia Center, 701 Fifth Avenue
                                                Sequence 12, Application US/08393305
Patent No. 5574138
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                                                                                                                                                                                                                                                                              ADDRESSEE: Seed and
STREET: 6300 Columb
CITY: Seattle
STATE: Washington
COUNTRY: USA
                                                                                      GENERAL INFORMATION:
APPLICANT: Grabst
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; LOCATION: 1...
US-08-393-305-12
                          US-08-393-305-12
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US-08-726-817-12
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16.4%; Score 80; DB 2; Length 345; 100.0%; Pred. No. 6.7e-31; tive 0; Mismatches 0; Indels
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APPLICANT: Anderson, Dirk
APPLICANT: Anderson, June
APPLICANT: Fung, Victor
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: BPITHELIUM-DERIVED T-CELL FACTOR
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/189,193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: Seed and Berry
STREET: 6300 Columbia Center, 701 Fifth Avenue
CITY: Seattle
STATE: Washington
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATTORNEY/AGENT INFORMATION:
NAME: MCAMSTERZ, DAVIÐ D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 480052.409C2
TELEPHONE: 206-622-4900
INFORMATION FOR SEQ ID NO: 12:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 12, Application US/09189193
Patent No. 6184359
GENERAL INFORMATION:
      TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             205 ATTGATGCTACTTTATATAC 224
                    TELEPHONE: 206-622-4900
INFORMATION FOR SEQ ID NO: 12
SEQUENCE CHARACTERISTICS:
LENGTH: 345 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 ATTGATGCTACTTTATATAC 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 345 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                 Query Match 16.4%
Best Local Similarity 100.(
Matches 80; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                              1..345
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CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98104
                                                                                                                                                                                                       NAME/KEY:
LOCATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-189-193-12
                                                                                                                                                                                                                                                   US-08-794-524-12
                                                                                                                                                                                  FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16.4%; Score 80; DB 2; Length 345; 100.0%; Pred. No. 6.7e-31; Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 12, Application US/08794524

Patent No. 5985262

GENERAL INFORMATION

APPLICANT: Grabatein, Kenneth

APPLICANT: Bisenman, June

APPLICANT: Bisenman, June

APPLICANT: Rauch, Charles

TITLE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR

NUMBER OF SEQUENCES: 15

CORRESPONDENCE ADDRESS:

ADDRESSEE: Seed and Berry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6300 Columbia Center, 701 Fifth Avenue
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CORRECT AFTEL CALLON DALL.
FILING DATE: 03-FEB-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATTORNEY/AGENT INFORMATION:
NAME: MCMASLERS, DAVID D.
REGISTRATION NUMBER: 33,963
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 480052.409C2
                                                                                                                                                                                                                                480052.40902
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/725,969
FILING DATE: 04-0CT-1996
CLASSIFICATION NUMBER: US 08/393,305
APPLICATION NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATTORNEY/AGENT INFORMATION:
NAME: MCMASTERS, DAVID D:
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 480052.409C:
TELECHUNE: 206-622-4900
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 345 base pairs
TYPE: NUCLEIC acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.(
Matches 80; Conservative
                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: Seattle
STATE: Washington
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; NAME/KEY: CDS
; LOCATION: 1..345
US-08-725-969-12
                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 98104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-794-524-12
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US-09-225-928-435
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                                                                                                         145 AACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGATCTTATTCAATCTATGCAT 204
                                                                                  Gaps
                                                                                                                          ;
                                                    Length 345;
                                                                               Indels
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                                                                                                                                                                                                                                                                                Sequence 435, Application US/08859998
Patent No. 5994076
GENERAL INFORMATION:
APPLICANT: Chenchik, Alex
APPLICANT: Jokhadze, George
APPLICANT: Biblashvilli, Robert
TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
TITLE OF INVENTION: EXPRESSION
NUMBER OF SEQUENCES: 1375
CORRESPONDENCE ADDRESS:
                                               Score 80; DB 4; L
Pred. No. 6.7e-31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query-Match 5.5%; Score 27; DB 2; 1
Best Local Similarity 100.0%; Pred. No. 0.0002;
Matches 27; Conservative 0; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
COMPUTER: SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows
CURRENT APPLICATION DATA:
                                     16.4%; Sco...
100.0%; Pred. No. v...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: oligonucleotide primer US-08-859-998-435
                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Fish & Richardson, P.C.
STREET: 2200 Sand Hill Road, Suite 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Field, Bret E. REGISTRATION NUMBER: 37,620
REFERENCE/DOCKET NUMBER: 09096/002001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-322-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 21-MAY-1997
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: 415-884-0875
INFORMATION FOR SEQ ID NO: 435:
SEQUENCE CHARACTERISTICS:
LENGTH: 32 base pairs
                                                                                                                                                                        205 AFTGATGCTACTTTATATAC 224
                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             single
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                                          Ouery Match
Best Local Similarity
Matches 80; Conserv
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                                                                                                                                                                                                                                                                 JS-08-859-998-435
US-09-189-193-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STATE:
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                                                                                  Jokhadze, George
Bibliashvilli, Robert
TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
EXPRESSION
NUMBER OF SEQUENCES: 1375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Veerapaneni, Dange
APPLICANT: Hamanaka, Shoji
APPLICANT: Hamanaka, Shoji
APPLICANT: No. 60871720ava, Iwao
ITTLE OF INVENTION: RIBOZYMES TARGETED TO IL-15 MRNA
NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 4225 Executive Square, Suite 1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      oligonucleotide primer
                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSED for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/225,928
FILING DATE: 05-Jan-1999
CLASSIFICATION: <UNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 27; DB 4; Leng
Pred, No. 0.0002;
                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 2200 Sand Hill Road, Suite 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Field, Bret E.
REGISTRATION NUMBER: 37,620
REFERENCE/DOCKET NUMBER: 09096/002001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE DESCRIPTION: SEQ ID NO: 435
US-09-225-928-435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 08/859,998 FILING DATE: 21-MAY-1997 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5.5%; Score 27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22 TTGAGAAGTATTTCCATCCAGTGCTAC 48
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Sequence 435, Application US/09225928 Patent No. 6352829 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5.5%,
100.0%; Pre-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: 415-322-5070
TELEFAX: 415-854-0875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 4, Application US/08962503. Patent No. 6087172 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                    Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEC ID NO: 435:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 32 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: nucleic acid
STRANDEDNESS: single
                                                              APPLICANT: Chenchik, Alex
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                  ZIP: 94025
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                             Menlo Park
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear MOLECULE TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27; Conservative
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Gaps
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                                                                                                                                          Query Match
4.3%; Score 21; DB 3; Length 21;
Best Local Similarity 81.0%; Pred. No. 0.2;
Matches 17; Conservative 4; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Vecrapanen1, Dange
APPLICANT: Vecrapanen1, Dange
APPLICANT: Hamanaka, Shoji
APPLICANT: Hamanaka, Shoji
APPLICANT: No. 60871/2awa, Iwao
APPLICANT: NO. 60871/2awa, Iwao
ALTILE OF INVENTION: RIBOZYMES TARGETED TO IL-15 MRNA
NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: La Jolla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.3%; Score 21; DB 3;
61.9%; Pred. No. 0.2;
tive 8; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows 95
SOFTWARE: FRASTSO for Windows Version 2.0b
CURRENT APPLICATION DATA:
FILING DATE: 31-OCT-1997
ATTORNEY AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REGISTRATION NUMBER: 38.347
REGISTRATION NUMBER: 38.347
REFERENCE TOOKET NUMBER: 09326/002001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 619/678-509
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
LENGTH: 21 base pairs
TYPE: nucleic acid
STRANDEDNESS: Single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Sequence 10, Application US/08392317B; Patent No. 579596
GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
                                                                                                                                                                                                                                                                                                                                                         294 TTCACATGAGTCCGGAGATAC 314
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Best Local Similarity 61.99
Matches 13; Conservative
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MEDIUM TYPE: Diskette
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
MOLECULE TYPE: RNA
US-08-962-503-6
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COUNTRY: USA
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US-08-392-317B-10/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Vecrapanent, Dange
APPLICANT: Vecrapanent, Dange
APPLICANT: Hamanaka, Shoji
APPLICANT: No. 60871/2awa, Iwao
TITLE OF INVENTION: RIBOZYMES TARGETED TO IL-15 MRNA
NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 4225 Executive Square, Suite 1400
CITY: La Jolla
                                                                                                   MODIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows 95
SOFTWARE: FastSEO for Windows Version 2.0b
CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US/08/962,503
FILING DATE: 31-0CT-1997
ATTORNEY/AGENT INFORMATION:
NAME: Haile, Ph.D., ilsa A
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 39326/002001
TELECOMMUNICATION INFORMATION:
TELEPAX: 619/678-5099
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 base pairs
TYRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READBLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows 95
SOFTWARE: FastSEQ for Windows 95
SOFTWARE: FASTSEQ for Windows 95
SOFTWARE: PROJECTION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US/08/962,503
FILING DATE: 31-OCT-1997
ATTORNEY/AGENT INFORMATION:
NAME: HAILE, Ph.D., Lisa A
REGISSTRATION NUMBER: 38.347
TELECOMMUTCATION INFORMATION:
TELEPHONE: 619/678-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.3%; Score 21; DB 52.4%; Pred. No. 0.2; tive 10; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-962-503-6; Sequence 6, Application US/08962503; Sequence 6, Application US/08962503; Patent No. 6087772; GENERAL INPORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     88 GGCATTCATGTCTTTTG 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GGCAUUCAUGUCUUCAUUUG 21
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INFORMATION FOR SEQ 1D NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 52.49
Matches 11; Conservative
                                                                                     COMPUTER READABLE FORM:
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  La Jolla
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USA
                                              USA
           STATE: CA
COUNTRY: USA
TO 92037
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Score 21; DB 3; Length 36;
Pred. No. 0.2;
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CMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Word for Windows 95, 7.0
SOFTWARE: PatentIn Ralease #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/134,134A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 10, Application US/09134134A
Patent No. 6165466
GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Patton, Raymond
TITLE OF INVENTION: Antagonists of IL-15
UNBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Immunex Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Preu. ...
                                                                                               APPLICATION NUMBER: US/08/392,317
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STREET: 51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/392,317
                                                                                                                                   ATTORNEY AGENT INFORMATION:
NAME: Malaska, Stephen L.
REGISTRATION NUMBER: 32,655
REFRENCE/DOCKET NUMBER: 2831
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
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NAME: Malaska, Stephen L.
REGISTRATION NUMBER: 32,655
REFERENCE/POCKET NUMBER: 28
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     32,655
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: 206-587-0430 INFORMATION FOR SEQ ID NO: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.
Matches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                       LENGTH: 36 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 36 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: Seattle
STATE: Washington
                                                                                                                                                                                                                                                                                                                                                                     linear
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HYPOTHETICAL:
US-09-134-134A-10
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                                                                                                                         FILING DATE
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.00.0%; Pred. No. 0.2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 51 University Street
CITY: Seattle
STATE: Washington
COUNTRY: USA
ZIP: 98101
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING-SYSTEM: Word for Windows 95, 7.0
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Word for Windows 95, 7.0
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/392,317B
APPLICANT: Paxton, Raymond
APPLICANT: Pettit, Dean
TITLE OF INVENTION: Antagonists of IL-15
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Immunex Corporation
STRETS: Immunex Corporation
STRETS: Sattle
CITY: Seattle
STATE: Washington
COUNTRY: USA
21P: 9810'
WPUTTY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 10, Application US/09134132
Patent No. 6013480
GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Paxton, Raymond
APPLICANT: Pettit, Dean
TITLE OF INVENTION: Antagonists of IL-15
CORRESPONDENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Immunex Corporation
STREET: 51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: Malaska, Stephen L.
REGISTRATION NUMBER: 32,655
REFERENCE/DOCKET NUMBER: 2831
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 10:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ouery Match
Best Local Similarity 100.0%; Pr
Matches 21; Conservative 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               36 ATGTTCATCAACACTTCTTGA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 36 base pairs
TYPE: nucleic acid
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PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
CLASSIFICATION: 536
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-134-132-10/c
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	20	22	21	22	22	22	22	22	22	22	22	23	22	21	22	21	21	22	22	22	22	22	23	21	22	22	22	21	7.7	22	77	7 (77	22	23	22	23	21	22	22	55	21
	791	791	794	797	797	810	810	825	828	828	830	833	837	851	851	852	853	854	859	860	867	867	875	884	884	890	910	927	20.0	942	747	2 T	9,0	953	954	975	979	993	01	1023	02	1033
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ALIGNMENTS

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Interleukin-15; epithelium-derived T-cell factor; T lymphocyte; ss.
                                                                                                      Location/Qualifiers
                                                                                                            1..489
/*tag= a
/note= "claimed"
                                                                                                                                          /*tag= b
/note= "claimed"
                                                         Simian interleukin-15 precursor.
             AAT00524 standard; cDNA; 489
                                           (first entry)
                                                                                                                                 145..489
                                           02-FEB-1996
                                                                                       Cebus apella
                                                                                                                                  misc_feature
                                                                                                                                                             WO9527722-A.
                                                                                                                                                                            19-0CT-1995
                            AAT00524;
       AAT00524
RESULT
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361 ATCTTGTCTTAATGGGAATATAACAGAATCTGGATGCAAAGAATGTGAGGAACTAGAG 420

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A simian species of IL-15 (sIL-15) was purified and analysed by SDS-
RAGE. Bloassay of unstained gel slices indicated IL-15 activity was
assoc. with proteins having mol. wis in the range of 15-17 kba. The
assoc. with proteins having mol. wis in the range of 15-17 kba. The
Identity of the first 33 AAs of AAR83309. Subsequent sequencing of a
constant clone obtd. from a simian library provided a sequence encoding
the polypeptide AAR83436. AAR83436 comprises a relatively short 48 AA
leader sequence and a mature polypeptide AAR83309. The sequence of the
Neterminal 31 AAs of AAR83309 was used to design synthetic PCR primers
of the Neterminus were used to design on primer.
The AA sequences of the simian mature Neterminus 26-31 were used
to design a second primer, a degenerate mixture coding for a
complement of all possible codon usages of AAS 26-31, omitting
complement of all possible codon usages of AAS 26-31, omitting
complement of all possible codon usages of AAS 26-31, omitting
colls were used as templates. A 92 bp DNA fragment was used as a
hybridisn. probe to screen a portion of a plasmid library contg.
CONA inserts prepd, from CV-1/EBNA polyadenylated RNA. This
resulted in the isolation of clone C85:sIL-15 that has an ORF
the precursor polypeptide.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121 GCAGGGCTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gagtccggagatacagatattcatgatacagtagaaaatcttatcatcctagcaaacaac 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Isolated DNA encoding polypeptide with mammalian IL-15 activity stimulates proliferation and differentiation of T cells, used for treating carcinoma(s), melanomas, etc. and viral infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241 CCCAGTTGCAAGGTAACAGCAATGAAGTGCTTTCTCTTGGAGTTGCAAGTTATTTCACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGTCCGGAGATACAGATATTCATGATACAGTAGAAAATCTTATCATCCTAGCAAACAAC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 489 BP; 162 A; 81 C; 92 G; 154 T; 0 other;
                                                                                                          Fung V, Grabstein KH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 489; DB 16;
100.0%; Pred. No. 5.1e-231;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                    Claim 28; Page 26; 48pp; English.
 94WO-US03793.
                                   94WO-US03793
                                                                                                        Anderson DM, Eisenman JR,
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Best Local Similarity 100.
Matches 489; Conservative
                                                                   (IMMV ) IMMUNEX CORP
                                                                                                                                                           WPI; 1995-373556/48.
                                                                                                                                                                             P-PSDB; AAR83436
06-APR-1994;
                                   06-APR-1994;
                                                                                                                           Rauch C;
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 CTAAAGAGTCATTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGT
                                                                                                                                                                                                             241 CCCAGTTGCAAGGTAACAGCAATGAAGTGCTTTCTCTTGGAGTTGCAAGTTATTTCACAT
                                                                                                                                                                                                                              301 GAGTCCGGAGATACAGATATTCATGATACAGTAGAAAATCTTATCATCCTAGCAAACAAC
                                                                                                                                                                                                                                                                                                                      361 ATCTTGTCTAATGGGAATATAACAGAATCTGGATGCAAAGAATGTGAGGAACTAGAG
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                                                                                                                                                            GAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACAGAAAGTGATGTTCAC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hETF; human IMTLH bone marrow stromal cell line; T-cell; B-ce. lymphocyte; proliferation; differentiation; gastrointestinal; HIV infection; human immunodeficiency virus; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Grabstein KH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human epithelium derived T cell factor cDNA.
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1..489
/*tag= a
145..486
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
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/product= hETF
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                                                                                                                                                                                                                                                                                                                                                                                                                                           481 ACTTCTTGA 489
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22-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-MAR-1993;
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                                     cDNA generated from PMA-stimulated CV-1/EBNA cells was amplified by PCR using primers based on the N-terminal sequence of simian interleukin-15 (sIL-15). A probe based on an isolated clone was ut oscreen a plasmid library containing cDNA inserts prepared from CV-1/EBNA poly-A RNA. Clone C85.sIL-15 was isolated that has the
New purified interleukin-15 - which induces T cell proliferation and differentiation, used for the treatment of tumours and viral
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 489; DB 16; Length 489; 100.0%; Pred. No. 5.1e-231; Live 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                         Interleukin-15; IL-15; SIL-15; T-cell growth factor;
African green monkey; CV-1; antitumor; virucide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 489 BP; 162 A; 81 C; 92 G; 154 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Grabstein KH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /product= mature IL-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Fung V,
                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                      1..489
/*tag= a
/product= IL-15 p
1..144
/*tag= b
                                                                                                                                                                                  AAQ84583 standard; cDNA; 489 BP.
                                                                                                                                                                                                                                                                Simian IL-15 clone C85.sIL-15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94ZA-0002636
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Rauch C;
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                                                                                                                                                                                                                                                                                                                                 Cercopithecus aethiops.
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ORF given in AAQ84583.
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                                                                                                      ACTICITGA 489
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                                                                                                                                                                                                                                      04-SEP-1995
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                                                                                                                                                                                                                                                                                                                                                                                                                sig_peptide
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                                                                                                                                                                                                            AAQ84583;
                                                                                         481
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                                                                                                                                                                       AAQ84583
                                                                                                                                                          RESULT
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This is the nucleotide sequence encoding a simian epithelium-derived T-cell factor (EFF). The protein was purified from African green monkey CV-1 kidney cells in culture by conventional chromatography: hydrophobic, anion exchange and reverse phase HPLC, followed by separation by SDS-PAGE. The proteins from the SDS-PAGE were transferred to a PVDF membrane and the band corresp. to EFF was cut out for peptide sequencing Primers were synthesised based on this sequence and used to amplify a proliferate by phorbol 12-myristate 13-acetate. The 92 bp fragment was labelled and used as a probe to isolate a clone C85.sFTF which contained this sequence. FTF is a protein of 15-17 kD which is expressed by epithelial cells and stimulates proliferation and/or differentiation of precursor and/or mature T cells. The protein is therefore useful for promoting long term in vivo culture of T-lymphocytes and T-cell lines.
                                            Epithelium-derived T-cell factor; simian; human; culture; prollferation; epithelial cell; differentiation; T-lymphocyte; African green monkey; primer; PCR; polymerase chain reaction; amplification; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTAAAGAGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGT 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                            New isolated simian and human epithelium-derived T-cell factors which stimulate the proliferation and/or differentiation of T-lymphocytes and T-cell lines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 489;
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                                                                                                                                                                                                                                                                                                                                                                       Rauch
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100.0%; Pred. No. 5.1e-231;
11ve 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                       Grabstein K,
                Simian epithelium-derived T cell factor gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 21; Column 19-20; 22pp; English.
                                                                                                                                    Location/Qualiflers
                                                                                                                                                                                                                                                                                                                                                                      Fung V,
                                                                                                                                                                                                                                                                                93US-0031399
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/*tag= a
145..486
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Best Local Similarity 100.
Matches 489; Conservative
                                                                                                                                                                                                                                                                                                                                                                       Eisenman J,
                                                                                                       Cercopithecus aethiops.
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                                                                                                                                               sig_peptide
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                                                                                                                                                                      Human ETF (epithelium derived T cell factor) cDNA was isolated by screening a IMTLH cell cDNA library with a simian ETF probe. The IMTLH cell line was derived from a stable transformation of a human bone marrow stromal cell culture with pSV3Neo. Mature hETF induces proliferation and/or differentiation of precursor or mature T cells and is useful for promoting long-term in vitro culture of T-lymphocytes and T-cell lines. It is used for treating gastrointestinal diseases including peptic ulcer, colltis and malignancy and for treating HIV infection.
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100.0%; Pred. No. 5.1e-231;
ive 0; Mismatches 0;
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                                                                                                                                             Claim 1; Fig 2; 35pp; English.
                                          P-PSDB; AAW09100 AND AAW09101
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                                                                                                                  disease and HIV infection
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                           WPI; 1996-517923/51
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Best Local Similarity
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Epithelium derived T-cell factor; ETF; human; gastrointestinal disease; B-cell stimulation; epithelium; villi; CD4+; CD8+; T-cell stimulation; treatment; prevention; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A cDNA clone (AAT36634) codes for simian interleukin-15 (IL-15) (AAR98526), a T-cell growth factor. Muteins of simian IL-15 or human IL-15 (see also AAR98527) are useful as antagonists of IL-15 and can be prepd. by PCFmediated mutagenesis of the encoding sequences. Preferred muteins have amino acid substitutions at Asp56 and/or Gln156 of the IL-15 protein that prevent signal transduction. They are useful for treating graft-versus-host
                                                                                                  GAGTCCGGAGATACAGATATTCATGATACAGTAGAAAATCTTATCATCCTAGCAAACAAC
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                                                                                                                                                                                                                                                                                                                                                                                                         Interleukin-15; antagonist; mutein; graft versus host disease;
allograft; T-cell growth factor; ss.
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100.0%; Score 489; DB 17;
Best Local Similarity 100.0%; Pred. No. 5.1e-231;
Matches 489; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             disease and for prolonging allograft survival
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                                                                                                                                                                                                  This sequence encodes a human epithelium-derived T-cell factor (ETF) which is used in a method for treating or preventing gastrointestinal disease. These polypeptides have particular application in the treatment of gastrointestinal disorders associated with disruption of the gastrointestinal epithelium or villi such as chemotherapy- and radiation-therapy induced enteritis (gut toxicity), mucositis, peptic ulcer disease, gastroenteritis and collis, villus atrophic disorders, malignancy and inflammatory bowel disease. ETF polypeptides may also be useful in the treatment of human immunodeficiency virus (HTV) and HIV-associated disease due to their ability to stimulate CD4+ and CD8+ cells. Biologically active ETF may be used to treat a variety of other diseases or conditions where T-cell or B cell stimulation is desired.
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                                                                                                                                 Treatment or prevention of gastrointestinal diseases - by administering epithelium-derived T-cell factor polypeptide
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                                                       Grabstein KH;
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100.0%; Pred. No. 5.1e-231;
ive 0; Mismatches 0;
                                                                                                                                                                         Claim 1C; Column 37-40; 34pp; English.
                                                     Fung V,
 94US-0233606
                                                     Eisenman JR,
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                          (IMMV ) IMMUNEX CORP.
                                                                                          WPI; 1998-100295/09
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22-APR-1994;
                                                     Anderson DM,
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The invention relates to an isolated antibody that binds specifically to a similan or human epithelium-derived T-call factor (ETF) polypeptide. The antibodies are used, optionally when immobilized or labeled, to detect and quantify ETF in standard immunossaps. They may also be used as diagnostic and therapeutic agents, e.g. when conjugated to toxins (or their precursors) or radionuclides. ETF induces prolliferation and/or differentiation of T cells (or their precursors), e.g. for use in cestablishing long term in vitro cultures; and is also used to treat gastrointestinal disease (e.g. enteritis or mucositis induced by chemotherapy or radiation, peptide ulcer, gastroenteritis, colitis, chuman immune deficiency virus infection or associated disease, or generally in any studation requiring stimulation of T or B cell concreased anti-infections of immunoglobulins or certain cytokines, increased anti-infectious disease immunity, induction of T or B cell increased anti-infectious disease immunity, induction of T or E cell lytic cativity or increased destruction of tumour or virus infected cells. The
                                                                                                                                                                                                                                            Epithelium-derived T-cell factor; ETF; immunoassay; enteritis; ulcer; T cell proliferation; gastrointestinal disease; mucositis; colitis; gastroenteritis; villus atrophy; malignancy; inflammatory bowel disease; human immune defictency virus; tumour; human; ss.
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                                                                                                                                                                                  Human epithelium-derived T-cell factor (ETF) encoding DNA
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BP.
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93US-0031399.
94US-0233606.
96US-0725969.
AAX29480 standard; DNA; 489
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                                                                                                                           (first entry)
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22-APR-1994;
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             GAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACAGAAAGTGATGTTCAC
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                                                                                                                                                                                                                                                                                                                                                                                                                        Simian interleukin-15 (IL-15) nucleotide sequence.
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particularly celiac disease
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                                                        Length 489;
                                                                         Indels
                             G; 154 T; 0 other;
                                                       Score 489; DB 21;
Pred. No. 5.1e-231;
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                      This sequence represents human epithelium-derived T-cell factor (ETF) cDNA. ETF is a previously unidentified T-cell growth factor which stimulates precursor or mature CD4 and CD8+ T-lymphocytes to proliferate and differentiate. It also promotes proliferation of the gastrointestinal epithelium. The protein can be used to promote long-term in vitro culture of T-lymphocytes and T-cell lines. ETF can be used for treating HIV infection, HIV-associated diseases, and other diseases or conditions where stimulation of T-cell proliferation would be desirable e.g., it could be used to augment the destruction of tumour cells or virally-linested cells. ETF may also be used to treat or prevent gastrointestinal diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                           disease, including chemotherapy and radiotherapy associated enteritis, assurementaris, colitis, inflammatory bowel disease and villus atrophic disorders. Chemotherapy and radiotherapy associated enteritis (gut toxicity) results in bleeding and sepais due to gastrointestinal flora entering the blood, and thus can limit the dosage of therapeutic agent administered to a cancer patient. ETF may therefore be used to increase the tolerated doses radiotherapy and chemotherapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTAAAGAGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGT 120
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                                                                                                                                                                                                      Anderson DM;
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                       /product- "Mature human ETF (AAY52311)"
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                                                                                                                                                                                                      Grabstein KH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                   Claim 1; Columns 37-40; 33pp; English.
                                                                                                                                                                                                      Fung V, Eisenman JR,
                                                                                                                   95US-0393305.
96US-0726817.
93US-0031399.
94US-0233606.
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Matches 489; Conservative
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                                                                                            03-FEB-1997;
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08-MAR-1993;
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Epithelium-derived T-cell factor; ETF; simian; human; enteritis;
gastrointestinal disease; mucositis; peptic ulcer; cytostatic;
villus atrophic disorder; inflammatory bowel disease; antlinflammatory;
anti-HIV; antlviral; T-lymphocyte stimulator; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antibodies that specifically binds epithelium-derived T-cell factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to simian and human epithelium-derived T-cell factor (ETF) polypeptides. Antibodies that specifically bind to the ETF polypeptides are used for treating or preventing gastrointestinal diseases, such as chemotherapy and radiation therapy-induced enteritis and mucositis, peptic ulcer disease, villus atrophic disorders and
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P-PSDB; AAB62014, AAB62015.
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inflammatory bowel disease; for increasing tolerated doses for radiation therapy and chemotherapy agents which are limited by gastrointestinal toxicity; and for treating HIV and HIV-associated diseases. The antibodies are further used to treat a variety of other diseases or conditions where it is desired to stimulate proliferation of IV-lymphocytes, to augment anti-infectious disease immunity, to induce CTL. LAK or NK lytic activity, or to augment the destruction of tumour cells or cells infected with virus. The present sequence represents a cDNA encoding the human ETF (HETF) polypeptide.
                                                                                                                                                                                              GCAGGCCTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATT 180
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                                                                                                                                                                                                                                                                       gaagatcttattcaatctatgcatattgatgctactttatatacagaaagtgatgttcac
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                                                                                                                     Length 489;
                                                                                                                                      Indels
                                                                                           Sequence 489 BP; 162 A; 81 C; 92 G; 154 T; 0 other;
                                                                                                                    100.0%; Score 489; DB 22; 100.0%; Pred. No. 5.1e-231;
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Best Local S:
Matches 489
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PAGE. Bioassay of unstained gel slices indicated IL-15 activity was associated in the range of 15-17 kba. The association of the 15-17 kba was sequenced. The results indicated the dentity of the first 33 AAs of AAR83309. Subsequent sequencing of a clone obtd. from a simian library provided a sequence encoding the polypeptide AAR83309. Subsequent sequence of the identity of the ARR83309. Subsequence encoding the polypeptide AAR83309. Subsequence of the clone obtd. from a simian library provided a sequence encoding the polypeptide AAR83309. Subsequence of the ideader sequence and a mature polypeptide AAR83309. The sequence of the N-terminal 31 AAs of AAR83309 was used to design synthetic PCR primers for the amplification of IL-15-specific DNA sequences. The first degenerate mixture coding for all possible codon usages. AAT00528.

The AA sequences of the simian mature N-terminus 26-31 were used degenerate mixture coding for a complement of all possible codon usages of AAS 26-31, omitting posn. 3 of Val (AAT00529, AAT00530). Polyadenylated RNAs from CV-1/EBNA polyadenylated RNAs from CV-1/EBNA polyadenylated RNA. This resulted in the isolation of clone C855.SIL-15 that has an ORRF for the in AARMANAS AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gatacagtagaaaatcttatcatcctagcaaacaacatcttgtcttctaatgggaatata 240
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Isolated DNA encoding polypeptide with mammalian IL-15 activity stimulates proliferation and differentiation of T cells, used fr treating carcinoma(s), melanomas, etc. and viral infections
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Grabstein KH;
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100.0%; Pred. No. 4.5e-160;
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/note= "claimed"
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Matches 345; Conserv
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Pred. No. 4.5e-160;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antibodies that specifically binds epithelium-derived T-cell factor polypeptide useful for e.g. treating or preventing gastrointestinal diseases, HIV and HIV-associated diseases, augmenting destruction of tumour cells
                                                                                                                                                                                                                                                                                                                                                                                                                    Epithellum-derived T-cell factor; ETF; simian; human; enteritis; gastrointestinal disease; mucositis; peptic ulcer; cytostatic; villus atrophic disorder; inflammatory bowel disease; antiinflammatory; antii+HIV; antiviral; T-lymphocyte stimulator; ss.
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445 CAGAGTTTTGTACATATTGTCCAAATGTTCATCAACACTTCTTGA 489
                          Sequence 345 BP; 124 A; 50 C; 64 G; 107 T; 0 other;
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                                                                                                                                                                                                                                                                                                                                                                  Human ETF (hETF) mature polypeptide encoding cDNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /product= "mature hETF"
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                                                                                                                                                                                               BP
                                                                                                                                                                                               AAF57025 standard; cDNA; 345
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96US-0725969.
93US-0031399.
94US-0233606.
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DB 22; Length 345;

Score 345;

70.68;

Query Match

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                                                                                                                                                  GATACAGTAGAAAATCTTATCATCCTAGCAAACAACATCTTGTCTTCTAATGGGAATATA 384
                             AACTGGGTGAATGTAATAAGTGATTTGAAAAAAATTGAAGATCTTATTCAATCTATGCAT 204
          Gaps
                                       88
                                                                               265 AAGTGCTTTCTCTTGGAGTTGCAAGTTATTTCACATGAGTCCGGAGATACAGATATTCAT
                                                                                                                                                                                          Interleukin-15; epithelium-derived T-cell factor; T lymphocyte;
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          Indels
                                                                                                                                                                                                                               Grabstein KH;
          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fung V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 36; Page 28-29; 48pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
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/note= "claimed"
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/note= "claimed"
                                                                                                                                                                                                                                                                                                     BP.
        ;
                                                                                                                                                                                                                                                                                                                                                                Human interleukin-15 precursor
                                                                                                                                                                                                                                                                                                    AAT00526 standard; cDNA; 489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94WO-US03793.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eisenman JR,
                                                                                                                                                                                                                                                                                                                                            02-FEB-1996 (first entry)
         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                145..489
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Best Local Similarity
Matches 345; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                P-PSDB; AAR83438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Anderson DM,
Rauch C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                misc_feature
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                                                                                                                                                                                                                                                                                                                         AAT00526
                                                                                                                                                                                                                                                                                  RESULT 13
                             145
                                                                                                                               121
                                                                                                                                                   325
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                                                                                                                                                                                          385
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New purified interleukin-15 - which induces T cell proliferation and differentiation, used for the treatment of tumours and viral
                                                                                Disclosure; Page 28-29; 47pp; English
                                                                                                                                                                                                               Best Local Similarity
Matches 157; Conserv
           P-PSDB; AAR66927.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-FEB-1995;
08-MAR-1993;
22-APR-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-MAR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US5574138-A.
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                                                        infection
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                                                                                                                                                                                                      Query Match
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sequence and cDNA sequence analysed (see AAR83309, AAR83436, AAR00524, AAT00525). Both the simian and the human ORFs encode a precursor polypeptide (AAR83436, AAR83438). The precursor polypeptides a 48-AA leader sequence and a sequence encoding mature simian or human IL-15 polypeptides. The active sinian and human IL-15 polypeptides are disclosed in AAR83309 6, AAR8310 respectively. The invention also comprises other mammalian IL-15, including human IL-15, that hybridise to probes defined by AAR8438. A plasmid contg. a recombinant clone of human IL-15 CDNA was abeposited with ATCC on Feb. 19 1993 under ATCC 69245. The deposit was named 141-hETF. AAR83435 is a mammalian mature IL-15 polypeptide. It is a generic sequence which encompasses both AAR83309 (simian) and AAR83310 (human) IL-15 mature polypeptides.
                                                                                                                                                                                                                                                                        127 CTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAAATTGAAGAT 186
                                                                                                                                                                                                                                                                                                                       67 AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                      .;
0
                                                                                                                                                                                                              Length 489;
                                                                                                                                                                                                                                      1; Indels
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antitumor; virucide; ss.
                                                                                                                                                                      Sequence 489 BP; 159 A; 79 C; 95 G; 156 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fung V, Grabstein KH;
                                                                                                                                                                                                            Score 107; DB 16;
Pred. No. 7.8e-43;
                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
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/product= IL-15 precursor
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                                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
                                                                                                                                                                                                          21.9%;
99.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human IL-15 clone I41.hETF.
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145..486
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                                                                                                                                                                                                                     Local Similarity 99.4
hes 157; Conservative
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                                                                                                                                                                                                              Query Match
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                                                                                                                                                            CTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAATTGAAGAT 186
                                                                                                                                                                                                         Gaps
A sIL-15 probe was prepared from isolated simian interleukin-15 CDNA and used to screen a CDNA library generated from the IMTLH cell line derived from human bone marrow stromal cells. Clone
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lymphocyte; proliferation; differentiation; gastrointestinal;
HIV infection; human immunodeficiency virus; ss.
                                                                                                21.9%; Score 107; DB 16; Length 489; 99.4%; Pred. No. 7.8e-43;
                                                                                                                        Indels
                                                           Sequence 489 BP; 159 A; 79 C; 95 G; 156 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Grabstein KH;
                                                                                                                                                                                                                                          Simian epithelium derived T cell factor cDNA.
                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fung V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                              BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /product= sETF
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P-PSDB; AAW09098 AND AAW09099.
                                     [41.hETF encoded human IL-15.
                                                                                                                                                                                                                                                                                                                            AAT49455 standard; cDNA; 489
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93US-0031399.
94US-0233606.
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                                                                                                                       Conservative
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/*tag= a
145.486
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Rauch

Grabstein K,

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Fung V,
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Eisenman J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (IMMV ) IMMUNEX CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1996-402367/40.
P-PSDB; AAR98527.
                    WPI; 1996-412063/41.
                              P-PSDB; AAW07255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo saptens.
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 Anderson D,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Epithelium-derived T-cell factor; simian; human; culture; proliferation;
epithelial cell; differentiation; T-lymphocyte; African green monkey;
primer; PCR; polymerase chain reaction; amplification; probe; ss.
                                                                                                                                                                                                                                                                                                                                                           AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
                                                                                                                                                                                                                                                                                                                  CTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGAT 186
                                                                                                                                                                                                                                                                                 Gaps
      New epithelium derived T cell factor - induces proliferation of T and B cells, stimulates destruction of tumour and virus-infected cells and protects against toxicity, partic. for treating intestinal disease and HIV infection
                                                                                The simian ETF (epithelium derived T cell factor) was isolated from African green monkey CV1/EBNA cell conditioned medium. The N-terminal sequence of the purified sETF was determined and then PCR primers were designed based on the sequence information. A 92 bp fragment was amplified from CV1/EBNA DNA and was used as a probe to screen a CV1/EBNA EDNA ilbrary for the full-length sETF coding proliferation and/or differentiation of precursor or mature T cells and is useful for promoting long-term in vitro culture of T-1ymphocytes and T-cell lines. It is used for treating gastrointestinal diseases including peptic ulcer, colitis and
                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                            Length 489;
                                                                                                                                                                                                                                                                                  1; Indels
                                                                                                                                                                                                                            Sequence 489 BP; 159 A; 79 C; 95 G; 156 T; 0 other;
                                                                                                                                                                                                                                                           Score 107; DB 17;
Pred. No. 7.8e-43;
                                                                                                                                                                                                                                                                                                                                                                                                       CTTATICAATCTAIGCATATIGAIGCTACTITATATAC 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human epithelium-derived T cell factor gene.
                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                        malignancy and for treating HIV infection
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                                                               Claim 1; Fig 1; 35pp; English.
                                                                                                                                                                                                                                                           21.98;
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145..486
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Best Local Similarity 99.4
Matches 157; Conservative
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This is the nucleotide sequence encoding a human epithellum-derived the corresp. African green was obtained using a 1.37 kb fragment of the corresp. African green monkey gene (AAT42242) as a probe to screen a cDNA library constructed from RNA derived from the IMTLH cell line. This cell line is derived by stable transformation of a human bone marrow stromal cell culture with psylace. From a pool of about 1000 cDNA clones, one clone I41.hETF contained this sequence. ETF is a protein of 15-17 kb which is expressed by epithelial cells and stimulates proliferation and/or differentiation of precursor and/or mature T cells. The protein is therefore useful for promoting long term in vivo culture of T-lymphocytes and T-cell lines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     67 ACTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Gaps
New isolated simian and human epithelium-derived T-cell factors which stimulate the proliferation and/or differentiation of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Interleukin-15; antagonist; mutein; graft versus host disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 489;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 489 BP; 159 A; 79 C; 95 G; 156 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 21.9%; Score 107; DB 17; Best Local Similarity 99.4%; Pred. No. 7.8e-43; Matches 157; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           187 CTTATTCAATCTATGCATATTGATGCTACTTTATATC 224
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                                                                              T-lymphocytes and T-cell lines
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Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag= e
/note= "the codon CAA encoding Gln can be substituted
by a codon encoding Asp"
                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CICCCIAAAACAGAAGCCAACIGGGIGAAIGIAAITAAGTGAITIGAAAAAAAITGAAGGI 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 the codon CAG encoding Gln can be substituted by a codon encoding Asp"
                                                                                                                   A cDNA clone (AAT36635) codes for human interleukin-15 (IL-15) (AAR98527), a T-cell growth factor. Muteins of human IL-15 or simian IL-15 (see also AAR98526) are useful as antagonists of IL-15 and can be prepd. by PCR-mediated mutagenesis of the encoding sequences. Preferred muteins have amino acid substitutions at Asp56 and/or Gln156 of the IL-15 protein that prevent signal transduction. They are useful for treating graft-versus-host
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Interleukin-15; IL-15; mutant; human; treatment; autoimmune disease; psoriasis; multiple sclerosis; rheumatic arthritis; immune response; type 1 diabetes; AIDS; ss.
Antagonists of interleukin-15 - are used to treat patients having symptoms of graft-versus-host disease and for prolonging allo:graft survival
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                                                                                                                                                                                                                                                                                                                                                              Length 489;
                                                                                                                                                                                                                                                                                                                                                                                                    1; Indels
                                                                                                                                                                                                                                                                                             Sequence 489 BP; 159 A; 79 C; 95 G; 156 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                        21.9%; Score 107; DB 17;
99.4%; Pred. No. 7.8e-43;
Live 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wild-type interleukin-15 (IL-15) encoding DNA.
                                                                                                                                                                                                                                      transduction. They are useful for treating ydisease and for prolonging allograft survival
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/product= "interleukin-15"
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                                                                                    Disclosure; Page 25; 32pp; English
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/note= "the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAT97227 standard; DNA; 489
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145..486
                                                                                                                                                                                                                                                                                                                                                                                            157; Conservative
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445..447
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                                                                                                                                                                                                                                                                                                                                                                        Similarity
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Best Local S
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This DNA encodes a wild-type interleukin-15 (IL-15) polypeptide. This wild-type sequence can be mutated at codon positions 149 and 156 to create a mutant IL-15 polypeptide. The mutant polypeptide is at least of the callular vents that normally occurs when wild-type IL-15 and is capable of inhibiting at least one of the callular events that normally occurs when wild-type IL-15 specifically binds to a cell surface receptor. The mutant IL-15 is used for suppressing the immune response in a patient. It can be used for treating autoimmune diseases such as rheumatic arthritis, type I diabetes or a rheumatic disease selected from systemic lupus erythematosus (SLE), Siograen's syndrome, scleroderma, mixed connective tissue disease.

It can also be used to treat Hashimoto's thyroiditis, Grave's disease, dermatomyositis, polymyositis, seiter's syndrome and Behcet's disease, contiple sclerosis, myasthenia gravis, encephalomyelitis, a variety of pemphigus, psoriasis, inflammatory bowel disease, AIDS and vascular injury. The mutant IL-15 can also be used for reducing the viability of a cell that expresses a IL-15 antagonist.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mutant interleukin 15 polypeptide(s) - used for treating auto-immune diseases e.g psoriasis, multiple sclerosis etc.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 107; DB 18;
Pred. No. 7.8e-43;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mutant interleukin-15 (IL-15) encoding DNA.
                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Pages 54-55; 86pp; English.
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1..489
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99.4%;
96US-0016634
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                                                                                                                              Strom T;
                                                                                                                                                                                               WPI; 1997-549734/50.
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                                                                                                                              Maslinski W,
   26-APR-1996;
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AAT58404 standard; cDNA; 489 BP
AAT58404
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                                                                                                                                                                                                                                                                                                                                                                                                      This DNA encodes a mutant interleukin-15 (IL-15) polypeptide. The wild-type IL-15 sequence was mutated at codon positions 149 and 156 to create this mutant IL-15 polypeptide is at least ore diether this mutant IL-15 polypeptide is at least one of the cellular events that normally occurs when wild-type IL-15 one of the cellular events that normally occurs when wild-type IL-15 one of the cellular events that normally occurs when wild-type IL-15 or a restrict in a patient. It can be used for treating autoimmune diseases such as rheumatic arthritis, type I diabetes or a rheumatic disease selected from systemic lupus erythematosus (SIE), Sjogram's syndrome, solerodarma, mixed connective tissue disease.

It can also be used to treat Hashimoto's thyroiditis, Grave's disease, multiple sclerosis, myasthenia gravis, encephalomyelitis, a variety of pemphigus, psoriasis, inflammatory bowel disease, AIDS and vascular injury. The mutant IL-15 can also be used for reducing the viability of a cell that expresses a IL-15 receptor. It can also be used to diagnose
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                                                                                                                                                                                                                                                                                                                                                Mutant interleukin 15 polypeptide(s) - used for treating auto-immune diseases e.g psorlasis, multiple sclerosis etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                      /*tag= d
/note= "wild-type codon CAG encoding Gln is mutated
by codon GAC encoding Asp"
                                                                                                                     21.9%; Score 107; DB 18; Length 489; 99.4%; Pred. No. 7.8e-43; ive 0; Mismatches 1; Indels
'product= "mutant IL-15 polypeptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 489 BP; 158 A; 80 C; 96 G; 155 T; 0 other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  disease treatable with an IL-15 antagonist.
                                                                                                                                                                                                                                                                BETH-) BETH ISRAEL DEACONESS MEDICAL CENT
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Matches 157; Conservative
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                                              445..447
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                                                                                                                                                                                                                                                                                        Strom T;
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                                                                                                                                                                                                                  25-APR-1997;
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                                                                                                                                                                                          06-NOV-1997
            sig_peptide
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                                                                                                         mutation
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                                                                                                         IL-15; interleukin-15; T-cell growth factor; proliferation; stimulate; muscle growth; differentiation; hypertrophy; treat; atrophy; wasting; skeletal; cardiac; muscle; congestive heart fallure; diabetes-associated; glucose-intolerance; dyslipidaemia; rhabdomycosarcoma; dystrophy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This sequence encodes human interleukin-15 (IL-15) (see AAW01658), a known T-cell growth factor that can support proliferation of an IL-2-dependent cell line, CTLL-2. Compans. contgo. IL-15 to stimulate muscle growth, differentiation or hypertrophy are claimed. The stimulation of muscle growth is useful for treating atrophy, or wasting, in particular, skeletal and cardiac muscle atrophy. The compans. further comprises a steroid, growth hormone and insulin-like growth factor. Congestive heart failure, muscle wasting and diabetes-associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGAT 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     67 AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Muscle trophic compsn. contg. interleukin 15 - for treating, e.g. congestive heart failure, muscle wasting etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 489;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 489 BP; 159 A; 79 C; 95 G; 156 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21.9%; Score 107; DB 18; 99.4%; Pred. No. 7.8e-43;
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                                                                                                                                                                                                                                                                                                             Location/Qualifiers
1..489
/*tag= a
/product= IL-15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 12; 22pp; English.
                                                         Interleukin-15 coding sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96WO-US06423
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (IMMV ) IMMUNEX CORP.
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P-PSDB; AAW01658.
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                                                                                                                                                                                                                                                                Homo sapiens
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18-MAR-1997
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RESULT

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standard; DNA; 489
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                                                                                                                                                                                                  Key
              AAV02873
 RESULT
                                      δλ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This sequence encodes human interleukin-15 (IL-15), which can be used in immunogenic amount of a vaccine antigen (Ag) and an immunogenic amount of a vaccine antigen (Ag) and an immunogenicity-augmenting amount of IL-15. The composition is useful for enhancing the immunogenicity of a vaccine. The cytokine IL-15 is a potent enhancing the immunogenicity of a vaccine. The cytokine IL-15 is a potent of these cells and augments T cell mediated immune responses. The vaccine composition can sufficiently elicit an immune response without being deflectants to the recipient, especially when using pathogenically deficient antigens. Some vaccines do not elicit a strong immune response and cannot provide sufficient protection on further exposure to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; interleukin-15; IL-15; T cell; B cell; proliferation; vaccine;
cytokine; growth factor; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    Use of Interleukin-15 - to enhance immunogenicity of a vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21.9%; Score 107; DB 19; Length 489; larity 99.4%; Pred. No. 7.8e-43; Conservative 0; Mismatches 1; Indels (
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                                                                                   Human interleukin-15 coding sequence
                                                                                                                                                                          Location/Qualifiers
            BP.
           AAV23554 standard; cDNA; 489
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93US-0031399.
94US-0233606.
95US-0393305.
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                                                             (first entry)
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/*tag=
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nes 157; Conserv
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22-APR-1994;
22-FEB-1995;
                                                           13-JUL-1998
                                                                                                                                                  Homo sapiens
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                                    AAV23554;
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Matches
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AAV23554
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                                                                                             Epithelium derived T-cell factor; ETF; simian; gastrointestinal disease; B-cell stimulation; epithelium; villi; CD4+; CD8+; T-cell stimulation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sequence encodes a simian epithelium-derived T-cell factor (ETF)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Treatment or prevention of gastrointestinal diseases - by administering epithelium-derived T-cell factor polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "Epithelium-derived T-cell factor"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 107; DB 19;
Pred. No. 7.8e-43;
0; Mismatches 1;
                                                    Simian epithelium derived T-cell factor DNA.
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                                                                                                                                                                                                                                                          Location/Qualifiers
1..489
/*tag= a
1..48
/*tag= b
/*tag= c
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99.4%;
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93US-0031399.
94US-0233606.
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(first entry)
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Best Local Similarity
Matches 157; Conserv
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08-MAY-1998
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The invention relates to an isolated antibody that binds specifically to a simian or human epithelium-derived T-cell factor (ETF) polypeptide. The antibodies are used, optionally when immobilized or labeled, to detect and quantify ETF in standard immunoassays. They may also be used as diagnostic and therapeutic agents. e.g. when conjugated to toxins (or their precursors) or radionuclides. ETF induces proliferation and/or differentiation of T cells (or their precursors), e.g. for use in establishing long term in vitro cultures; and is also used to treat gastrointestinal disease (e.g. enteritis or mucositis induced by chemotherapy or radiation, peptide ulcer, gastroenteritis, collitis, villus atrophy, malignancy and inflammatory bowel disease), to treat human immune deficiency virus infection or associated disease, or generally in any situation requiring stimulation of T or B cell corressed anti-infected destruction of tumour or virus-infected cells. The received the constant of the constant o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Epithelium-derived T-cell factor; ETF; immunoassay; enteritis; ulcer;
T cell proliferation; gastrointestinal disease, mucositis; colitis;
gastroenteritis; villus atrophy; malignancy; inflammatory bowel disease;
human immune deficiency virus; tumour; simian; ss.
                            CICCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGAT 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sequence represents a DNA encoding a simian ETF precursor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antibodies specific for epithelium-derived T-cell growth factor
                                                                                                                                                                                                                                                                                                                                                                                                                       Simian epithelium-derived T-cell factor (ETF) encoding DNA.
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                                                                                                                        CTTATTCAATCTATGCATATTGATGCTACTTTATATAC
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                                                                                                                                                                                                                                                                             BP.
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93US-0031399.
94US-0233606.
96US-0725969.
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P-PSDB; AAY03756, AAY03757.
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04-OCT-1996;
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08-MAR-1993;
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Length 489;

Score 107; DB 20; Pred. No. 7.8e-43;

21.9%;

Query Match Best Local Similarity

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Use of antagonists of interleukin-15 for treating an inflammatory bowel disease, particularly celiac disease
                AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
                                                         CTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAATTGAAGAT 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
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                                                                                                                                                                                                                                                                                                                                 Interleukin-15; IL-15; antagonist; irritable bowel disease; IBD;
celiac disease; treatment; human; ss.
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                                                                                                                                                                                                                                                                                                       (IL-15) nucleotide sequence.
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Pred. No. 7.8e-43;
0; Mismatches 1;
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                                                                                                                 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC
                                                                                                                                187 cttattcaatctatgcatattgatgctactttatatac
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99.4%;
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                                                                                                                                                                                                                                                                                                       Human interleukin-15
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Best Local Similarity
Matches 157; Conserv
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                                                                                                                                                                                                                                                                                                                                                  celiac disease;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cDNA. ETF is a previously unidentified T-cell growth factor which stimulates precursor or mature CD4+ and CD8+ T-lymphocytes to proliferate and differentiate. It also promotes proliferation of the gastrointestinal epithelium. The protein can be used to promote long-term in vitro culture of T-lymphocytes and T-cell lines. ETF can be used for treating HIV infection, HIV-associated diseases, and other diseases or conditions where stimulation of T-cell proliferation would be desirable e.g., it could be used to augment the destruction of tumour cells or virallyinfected cells. ETF may also be used to treat or prevent gastrointestinal disease, including chemotherapy and radiotherapy associated enteritis,
                                                                                                                                                                                                      CD4+;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This sequence represents simian epithelium-derived T-cell factor (ETF)
          CTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAATTGAAGAT 186
                                                                                                                                                                                                                                                                                                                            'product= "Simian ETF precursor protein (AAY52308)"
                                                                                                                                                                                       ETF; epithelium-derived T-cell factor; T-cell; T-lymphocyte; prollferation; differentiation; growth factor; precursor; mature; CDB+; gastrointestinal; epithelium; cell culture; treatment; HIV; gastrointestinal disease; gastroenteritis; colitis; inflammatory bowel disease; villus atrophic disorder; enteritis; chemotherapy; radiotherapy; gut toxicity; cancer; side effect;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Stimulation of T-cells in human immunodeficiency virus infected
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Anderson DM;
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/product= "Mature simian ETF (AAY52309)"
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96us-0726817.
93us-0031399.
                                                                                                           AAZ38244 standard; cDNA; 489
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                                                                                                                                                                                                                                                       tolerated dose; ss.
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04-OCT-1996;
08-MAR-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence is human interleukin-15 (IL-15) DNA coding sequence located on chromosome 4q31. The polymorphic variants of IL-15 genes are useful for studying the expression and function of IL-15 and expressing
gastroenteritis, colitis, inflammatory bowel disease and villus atrophic disorders. Chemotherapy and radiotherapy associated enteritis (gut toxicity) results in bleeding and sepsis due to gastrointestinal flora entering the blood, and thus can limit the dosage of therapeutic agent administered to a cancer patient. ETF may therefore be used to increase the tolerated doses radiotherapy and chemotherapy.
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                                                                                                                                                                                                                                                                                                                                                                                                                        CTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGAT 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
                                                                                                                                                                                                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                                                                    Length 489;
                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                Sequence 489 BP; 159 A; 79 C; 95 G; 156 T; 0 other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human interleukin 15 (IL-15) DNA coding sequence.
                                                                                                                                                                                                                                                                              Score 107; DB 21;
Pred. No. 7.8e-43;
); Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITATICAATCTAIGCATATIGAIGCIACTTIAIAIAC 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Human IL-15 protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Fig 2; 78pp; English.
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                                                                                                                                                                                                                                                                                 21.9%;
99.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAD14465 standard; DNA; 489
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     38-FEB-2001; 2001WO-US04130
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/*tag=
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                                                                                                                                                                                                                                                                                                           Similarity
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Best Local Simi
Matches 157;
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06-FEB-2001

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IL-15 protein for use in screening for candidate drugs to treat diseases related to IL-15 activity. Genotyping or haplotyping an individual at the novel IL-15 activity. Genotyping or haplotyping an individual at the novel IL-15 potymorphic sites are useful for studying population.

diversity, anthropological lineage, the significance of diversity and inneage of the phenotypic level, paternity testing, forensic applications and for identifying associations between IL-15 genetic variation and a trait, so trait such as level of drug response or susceptibility to disease.

CC Infections as sociation between a genotype or haplotype and a trait, is useful for developing diagnostic tests and therapeutic treatments for infections, human immundeficiency virus and T-cell liukaemia. The dentification of an association between a clinical response and a diagnostic method to determine those individuals who will or will not respond to the treatment, or alternatively, will crespond at a lower level and thus may require more treatment, i.e. a greater dose of a drug. The genotyping or haplotyping methods are also useful for developing quugs targetting IL-15. The genotyping and haplotyping methods are also useful for developing arguetting IL-15. The genotyping and suspension of function of novel IL-15 isogene and also in gene therapy. Expression of an IL-15 isogene may be turned off by transforming the expression vector that expression vector cut that expression vector cut is that expression vector coll population of an expression vector.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        127 CTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGAT 186
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/note= "specifically claimed (see AAB62013)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 489;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 489 BP; 159 A; 79 C; 95 G; 156 T; 0 other;
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Pred. No. 7.8e-43;
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1..489
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/product= "sETF"
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99.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 21.99
Best Local Similarity 99.49
Matches 157; Conservative
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145..486
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factor (ETF) polypeptides. Antibodies that specifically bind to the polypeptides are used for treating or preventing gastrointestinal biolypeptides are used for treating or preventing gastrointestinal diseases, such as chemotherapy and radiation therapy-induced enteritis and mucositis, peptic ulter disease, villus atrophic disorders and inflammatory bowel disease; for increasing tolerated doses for radiation therapy and chemotherapy agents which are limited by gastrointestinal toxicity; and for treating HIV and HIV-associated diseases. The antibodies are further used to treat a variety of other diseases or conditions where it is desired to stimulate proliferation of T-lymphocytes and B lymphocytes, or the secretion of immunoglobulin B lymphocytes, to augment anti-infectious disease immunity, to induce CTL. LAM or NR lytic activity, or to augment the destruction of tumour cells or cells infected with virus. The present sequence represents a cDNA encoding the similan ETF (SETF) polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             67 AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                    polypeptide useful for e.g. treating or preventing gastrointestinal diseases, HIV and HIV-associated diseases, augmenting destruction of tumour cells
                                                                                                                                                                                                                                                                                                                                                                                                              invention relates to simian and human epithelium-derived T-cell
                                                                                                                                                                                                                                                                                   New antibodies that specifically binds epithelium-derived T-cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; interleukin 15; IL-15; ribozyme; enzymatic RNA; cleavage; rheumatoid arthritis; inflammatory disorder; ds.
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                                                                                                                                                                                              Rauch C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21.9%; Score 107; DB 22; Length 489; 99.4%; Pred. No. 7.8e-43;
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                                                                                                                                                                                              Elsenman JR,
                                                                                                                                                                                                                                                                                                                                                                         Claim 1; Column 35-36; 35pp; English.
                                                                  95US-0393305.
96US-0725969.
93US-0031399.
94US-0233606.
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                                                                                                                                                                                              Anderson DM,
                                 98US-0189193
                                                                                                                                                                                                                                              P-PSDB; AAB62012, AAB62013
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                                                                                                                                                                                                                              WPI; 2001-217801/22
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Matches 157; Conserv
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                                                                                                                                                                                              Grabstein KH,
                                                                                   04-OCT-1996;
08-MAR-1993;
                                                                                                                      22-APR-1994;
                                                                    22-FEB-1995;
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Homo sapiens

Fri Aug

24-MAR-2000; 2000WO-US08020

06-APR-1999;

WO200062736-A2.

26-OCT-2000.

(UYEC-) UNIV EAST CAROLINA. (NYCE/) NYCE J W.

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The present sequence describes an isolated RNA molecule which specifically cleaves mRNA encoding interleukin 15 (IL-15). The enzymatic RNA molecules can bind to and cleave mRNA encoding IL-15. They can be used for treating disorders associated with IL-15 such as inflammatory disorders, e.g. rheumatoid arthritis by inhibiting the synthesis of IL-15 in lymphocytes and preventing the recruitment and activation of macrophages. They can also be used to develop transgenic animals which can be used to identify the impact of increased or decreased IL-15 levels on a particular pathway or phenotype. The present sequence represents a human IL-15 DNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       67 AGTCATTITCTAACTGAAGCTGGCATTCATGTCTTCATTITGGGCTGTTTCAGTGCAGGG 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGAT 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 107; DB 20; Length 1202;
Pred. No. 7.7e-43;
0; Mismatches 1; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1202 BP; 355 A; 219 C; 249 G; 379 T; 0 other;
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                                                                                                                                                                                                                                                  New ribozymes targeted to interleukin-15 mRNA
                                                                                                                                                                                     Veerapaneni D;
                                                                                                                                                                                                                                                                                  Disclosure; Fig 8; 46pp; English.
                                                                                                                                                (HISM ) HISAMITSU PHARM CO LID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21.9%;
Best Local Similarity 99.4%;
Matches 157; Conservative (
                                                                                  98WO-IB01837
                                                                                                                97US-0962503
                                                                                                                                                                               Nozawa I,
                                                                                                                                                                                                                   WPI; 1999-313334/26
               WO9923208-A2
                                                                                29-OCT-1998;
                                                                                                              31-OCT-1997;
                                                 14-MAY-1999
                                                                                                                                                                                   Hamanaka S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        127
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                                                                                                                                                                                                                                                                                                                                                                                                                      Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                         Human low adenosine antisense oligonucléotide related sequence #2909.
                                                                                                                                                                                AAF21342 standard; DNA; 1202 BP.
                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                      14-MAR-2001
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The present invention describes low adenosine (A) courent antisense coligonuclectides and compositions (I) comprising them. In the antisense coligonuclectides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator, antiinflammatory, analgesic, communosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with a activity disorders and malignancies, such as stimulating and conversation and or activity of target polypeptides associated with a certivating peptide factors and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adenosine receptors, bradykinin receptors, central nervous system (CNS) and peripheral nervous and non-nervous system peptide receptors, binding proteins and malignancy associated proteins. The receptors, binding proteins and malignancy associated proteins. The antisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or surfactant hypoproduction which are associated with a disease or condition selected from pulmonary passociated with a disease or condition selected from pulmonary use pulmonary distress syndrome (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary infection, emphysema, choron observed respiration, respiratory distress syndrome from the and antisense oligonucleotides used in the exemplification of fragments and antisense oligonucleotides used in the exemplification of
                                                                                                                                                                                                                                                                                                                     Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              67 AGTCATTITCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  present invention describes low adenosine (A) content antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21.9%; Score 107; DB 21; 99.4%; Pred. No. 7.7e-43;
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Best Local Similarity 99.47
Matches 157; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the present invention.
                                                                                                                                                                                                                                                                              WPI; 2000-679539/66.
                                                                                                                                                                                                                                     Nyce JW;
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RESULT 30 AAA58044

Homo sapiens cancer; ss.

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The invention relates to antisense oligonuclectides (AAA58045, AAA58047-AA58057) capable of inhibiting the expression of human interleukin-15 (IL-15) by Mybridising to IL-15 mRNN (AAA58044). IL-15 is a member of the short chain, 4 alpha helix bundle cytokine family and is a potent T-cell growth factor and activator. IL-15 acts as a stimulator of various T-cell mediated pathological immune responses, such as uctoimmune disorders (e.g., rheumatoid arthritis, graft versus host disease and organ transplant rejection), and has a proinflammatory role in rheumatoid arthritis synovitis. The antisense oligonucleotides are alleviating inflammatory polyarthopathy associated with rheumatoid arthritis, organ transplant rejection (e.g., kidney transplant rejection, cell transplant rejections, asthma, lupus erythematosus and inflammatory bowel disease. The present sequence represents a cDNA copy of human IL-15 mRNA.
                                                                                                                            Human interleukin-15; IL-15; antisense therapy; expression inhibition; T-cell mediated immune response; autoimmune disorder; inflammatory polyarthropathy; rheumatoid arthritis; transplant rejection; graft versus host disease; lupus erythematosus; asthma; inflammatory bowel disease; gene therapy; immunosuppressive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antisense oligomer useful for alleviating inflammatory polyarthopathy associated with organ and cell transplant rejection, inhibits production of interleukin-15 by hybridizing to its mRNA -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1202 BP; 355 A; 219 C; 249 G; 379 T; 0 other;
                                                                                             Human interleukin-15 (IL-15) cDNA copy of mRNA.
AAA58044 standard; cDNA to mRNA; 1202 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RES & DEV.
                                                                                                                                                                                                                                                                                                                                                              "Human IL-15"
                                                                                                                                                                                                                                                                               Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BEN-GURION NEGEV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-IL00589.
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                                                               (first entry)
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806..1202
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                                                                                                                                                                                                                                                                                                              /*tag=
317..80
                                                                                                                                                                                                                antiinflammatory; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          UNNE ) UNIV
                                                                                                                                                                                                                                                Homo sapiens
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                                                               10-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-MAY-2000
                              AAA58044;
                                                                                                                                                                                                                                                                                 Key
5'UTR
                                                                                                                                                                                                                                                                                                                                                                               3'UTR
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the present invention describes a new composition comprising and cartisense oligonuclectide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammation, allergies, and/or antiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, meful printing lung diseases and diseases whose secondary effects affilict the lungs of a subject. They can be used for treating e.g. ischammic conditions, pulmonary vasoconstriction, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ONs reduces side effects. The A-containing ONs break down with the conchoconstriction and inflammation. AAA33313 to Parsent the nucleotide sequences given in the sequence listing from the present increase of decoyademosine which activates adenosine receptors causing bronchoconstriction and inflammation. AAA33313 to AAA53312 represent increation, which activates adenosine significant in the sequences are also called SEQ ID NO:1 to 185, but the sequences are also called SEQ ID NO:1 to 185, but the sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
Human; adenosine receptor; low adenosine antisense oligonucleotide;
phosphorothicate; impaired respiration; inflammation; allergy;
allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstriction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                                                                                                           Human adenosine receptor related polynucleotide 2nd SEQ ID NO:94.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes a new composition comprising an
                                                                                      Disclosure; Page 1260; 1343pp; English.
                                                                                                                                                                                                                            AAA35220 standard; DNA; 1202
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                                                                                                                                                                                                                                                                                                                     (first entry)
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0; Gaps

Score 107; DB 21; Length 1202; Pred. No. 7.7e-43; 0; Mismatches 1; Indels 0

Query Match 21.9%; Best Local Similarity 99.4%; Matches 157; Conservative

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AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126 383 agtcattttctaactgaagctggcattcatgtcttcattttgggctgtttcagtgcaggg 442 þe

in vivo or ex vivo. The antisense oligonucleotides of the invention are specific for interleukin-15 (IL-15), and can be delivered exogenously or can be expressed from DNA or RNA vectors. This sequence encodes the human IL-15 protein.

ulcerative colitis and cell proliferative disorders.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IL-15; interleukin.15; human; anti-II15; anti-inflammatory; hepatotropic; anti-arthritic; neuroprotective; antiprollferative; antiulcer; antisense; gene therapy; macrophage; inflammatory disorder; boval disease; arthritis; cirrhosis; multiple sclerosis; chronic liver disease; ulcerative colitis; cell proliferative disorder; treatment; ss.
(AAA32323 to AAA33992) are specifically claimed ONs from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences given in the sequence listing.
                                                                                                                                                                                                                                                              CTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGAT 186
                                                                                                                                                                                                                 cttcctaaaaacagaagccaactgggtgaatgtaataagtgatttgaaaaaattgaagat 502
                                                                                                                                                                                                 AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel antisense oligonucleotides targeted to interleukin-15 used treat inflammatory diseases and cell proliferative diseases such inflammatory bowel disease and chronic liver disease -
                                                                                                                                                                       ó
                                                                                                                                      Length 1202;
                                                                                                                                                                      1; Indels
                                                                                 Sequence 1202 BP; 355 A; 219 C; 249 G; 379 T; 0 other;
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                                                                                                                                 Score 107; DB 21;
Pred. No. 7.7e-43;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                   CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВР
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                                                                                                                                 21.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2000-171026/15.
                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human IL-15 cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Veerapanane D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200001851-A1
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                                                                                                                                                                157;
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                                                                                                                                Query Match
Best Local S
Matches 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAZ88708;
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                                                                                                                                                                                                                                383
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8888888
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes low adenosine (A) content antisense oligonuclectides and compositions (I) comprising them. In the antisense oligonuclectides the A is replaced by a 'Universal' or alternative base.
                                                                                                                                                                                             67 AGTCATTITCTAACTGAAGCTGGCATTCATGTCTTCATTITGGGCTGTTTCAGTGCAGGG 126
                                                                                                                                                                                                               CTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGAT 186
                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human low adenosine antisense oligonucleotide related sequence #2912.
                                                                                                                                                                       ;
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                                                                                                                                         Length 1202;
                                                                                                                                                                     Indels
                                                                                      Sequence 1202 BP; 355 A; 219 C; 249 G; 379 T; 0 other;
                                                                                                                                     Score 107; DB 21;
Pred. No. 7.7e-43;
                                                                                                                                                                                                                                                                                                                                     503 cttattcaatctatgcatattgatgctactttatatac 540
                                                                                                                                                                                                                                                                                                                      CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 1349-1353; 1592pp; English.
                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                            AAF21345 standard; DNA; 17904
                                                                                                                                     21.9%;
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                                                                                                                                                    99.48;
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J W.
                                                                                                                                                                     Conservative
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                                                                                                                                                    Similarity
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(NYCE/) NYCE
                                                                                                                                                                Matches 157;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-MAR-2001
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                                                                                                                                     Query Match
                                                                                                                                                     Best Local
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chemothins and antibody receptors, cytokines and chemothnes, endogenously produced specific and non-specific enzymes, binding proteins, adhesion molecules and their receptors, cytokine and chemothne receptors, adenesion molecules and their receptors, cytokine and norwows system (CNS) and peripheral nervous and non-nervous system receptors, CNS and peripheral nervous and non-nervous system peripheral nervous and non-nervous system peripheral nervous and non-nervous system receptors, CNS and peripheral nervous and non-nervous system nervous system peripheral nervous and non-nervous system nervous nervous system nerv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
(I) can have respiratory, bronchodilator, antiinflammatory, analgesic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with lung/respiratory disorders and mailgnancies, such as stimulating and activating peptide factors and transmitters, transcription factors,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                and/or cancer. AAF18434 to AAF21543 represent human polynucleotide fragments and antisense oligonucleotides used in the exemplification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1631 agteattttetaaetgaagetggeatteatgtetteattttgggetgttteagtgeaggg 1690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 pulmonary transplantation rejection, pulmonary infections, bronchitis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CICCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGAT 186
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17904 BP; 6014 A; 2945 C; 3330 G; 5615 T; 0 other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                the present invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
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The present invention describes low adenosine (A) content antisense oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides and compositions (I) comprising them. In the antisense (I) can have respiratory, bronchodilator, antifilammatory, analgesic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with lungivespiratory disorders and malignancies, such as stimulating and activating peptide factors and transmitters, transcription factors, immunoglobulins and antibodods, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adenosine molecules and their receptors, cytokine and chemokine receptors, adenosine receptors, bradykinin receptors, central chemokine receptors, adenosine receptors, bradykinin receptors, central contracts.

Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions -

99US-0127958.

06-APR-1999;

(UYEC-) UNIV EAST CAROLINA.

WPI; 2000-679539/66.

Nyce JW;

24-MAR-2000; 2000WO-US08020.

Disclosure; Page 1344; 1592pp; English.

receptors, ONS and peripheral nervous and non-nervous system peptide transmitters, defensins, growth factors, vasoactive peptides and transmitters, defensins, growth factors, vasoactive peptides and antisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or lung inflammation, allergy(les) and/or bronchoconstriction) and/or lung inflammation, allergy(les) and/or surfactant hypoproduction which are associated with a disease or condition selected from pulmonary vasoconstriction, inflammation.

Condition selected from pulmonary vasoconstriction, inflammation, hypertension, emphysema, chronic obstructive pulmonary distress syndrome (RDS), pain, cystic fibrosis (CF), allergic thinitis (AR), pulmonary hypertension, emphysema, chronic obstructive pulmonary distress syndrome conduct transplantation rejection, pulmonary infections, bronchitis, and/or cancer. AART8434 to AARZ1643 represent human polynucleotide

the present invention.

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Human adenosine receptor related polynucleotide 2nd SEQ ID NO:93.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 1248;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1248 BP; 397 A; 209 C; 223 G; 419 T; 0 other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6.2e-37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19.4%; Score 95; DB 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          190 ATTCAATCTATGCATATTGATGCTACTTTATATAC 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19.10,
100.08; Pre-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 95; Conserv
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ID AAA3
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Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactent depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human low adenosine antisense oligonucleotide related sequence #2908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAF21341 standard; DNA; 1248 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
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14-MAR-2001

AAF21341;

AAF21341 RESULT

WO200062736-A2. Homo sapiens.

cancer; ss.

26-OCT-2000.

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Gaps

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AAZ37358 standard; DNA; 1248

36

RESULT

AAZ37358

(first entry)

04-FEB-2000

AAZ37358;

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The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleals acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic, antiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, sathma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasists to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ONs reduces side effects. The A-containing ONs break down with the release of decyydenosine which activates adenosine receptors causing bronchoconstriction and inflammation. AAA33313 to AAA33312 represent the nucleotide sequences given in the sequence listing from the present invention, which correspond to SEO ID NO: 11 to 1680 (AAA3323) to AAA33323 to AAA33323 to AAA33332 are also called SEO ID NO: 10 to 185, but the sequences differ from the previously named sequences. SEO ID NO: 11 to 1680 (Invention do not match up with their corresponding SEO ID NO: sequences given in the sequence listing.
                                         phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
                          adenosine receptor; low adenosine antisense oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstriction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                       cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 1260; 1343pp; English.
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                                                                                                                                                                                                                                                                               WO200009525-A2
                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                            03-AUG-1999;
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0
                                                 130 CCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGATCTT 189
                                                                  Gaps
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    Length 1248;
19.4%; Score 95; DB 21; I
100.0%; Pred. No. 6.2e-37;
ive 0; Mismatches 0;
                                                                                                    190 ATTCAATCTATGCATATTGATGCTACTTTATATAC 224
                                                                                                                  627 attcaatctatgcatattgatgctactttatatac 661
                          Conservative
            Local Similarity
                          95;
Query Match
             Best Loca
Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This sequence encodes the human interleukin-15. The invention relates to antisense compounds that are targeted to a 5' or 3' untranslated region (5'0TR or 3'0TR) of a nucleic acid molecule encoding human interleukin-15 (LL-15), and inhibit the expression of human IL-15. The antisense inhibitors are is useful for inhibiting expression of IL-15 in human cells or tissues in vitro, for treating humans or other animals suspected for having or being prone to a disease associated with IL-15 expression, e.g. inflections, inflammation or tumours. The inhibitors can also be used for research or diagnostic purposes. Using antisense compounds specifically and effectively inhibits IL-15 function.
                                                                                       Interleukin-15; IL-15; antisense inhibitor; untranslated region; 5'UTR; 3'UTR; human; infection; inflammation; therapy; diagnosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                      Antisense compound useful for inhibiting human interleukin-15 expression useful for treating diseases associated with interleukin-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          130 CCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGATCTT 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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6.2e-37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19.4%; Scor.
100.0%; Pred. No. v...
0; Mismatches
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                                                          Human Interleukin-15 coding sequence.
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                                                                                                                                                                                                                        98US-0200141.
                                                                                                                                                                                                                                                     98US-0200141.
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Best Local Similarity 100.0
Matches 95; Conservative
                                                                                                                                                                                                                                                                                                                 Cowsert LM;
                                                                                                                                                                                                                                                                                  (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                             WPI; 2000-022283/02.
                                                                                                                                                                                                                                                                                                                                                          P-PSDB; AAY54825
                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                        25-NOV-1998;
                                                                                                                                                                                                                                                   25-NOV-1998;
                                                                                                                                                              US5985663-A.
                                                                                                                                                                                            16-NOV-1999
                                                                                                                                                                                                                                                                                                               Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                     expression
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AXAXEX
XAXXAX
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Human adenosine receptor related polynucleotide 2nd SEQ ID NO:97.

antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss. phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory; adenosine receptor; low adenosine antisense oligonucleotide;

Homo sapiens.

WO200009525-A2.

24-FEB-2000.

99WO-US17712 03-AUG-1999; 98US-0095212 03-AUG-1998;

(UYEC-) UNIV EAST CAROLINA.

Nyce JW;

WPI; 2000-205971/18.

New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstriction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or cancers

Disclosure; Page 1264–1268; 1343pp; English.

targets nucleic acids inventions a new composition comprising an targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The Own can have antiinflammation, allergies, and/or inflammation. The Own can have antiinflammation, allergies, and/or antiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impedired airways, including lung disease and diseases whose secondary e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fubrosis, pulmonary hypertension, emphysema, chronic obstructive pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ONS reduces side effects. The A-containing ONS break down with the release of deoxyadenosine which activates adenosine receptors causing bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the nucleotide sequences given in the sequence listing from the present libs sequences are also called SEO ID No: 1 to 185, but the sequences differ from the previously named sequences. SEO ID No: 1 to 1680 (AAA33233 to AAA33232 are specifically claimed ONS from the present invention. Wh. B. Sequences Sequences. SEO ID No: sequences in the sequence of the present invention do not match up with their corresponding SEQ ID No: sequences The present invention describes a new composition comprising an NAMES OF COLORD COLORD

Seguence 17844 BP; 6000 A; 2932 C; 3322 G; 5590 T; 0 other;

ó Gaps ; 0 Score 95; DB 21; Length 17844; Pred. No. 6e-37; 0; Mismatches 0; Indels 0; 19.4%; Score 95; DB ilarity 100.0%; Pred. No. 6e-Conservative 0; Mismatches Local Similarity Query Match Best Loca Matches

- ò 셤
- 190 ATTCAATCTATGCATATTGATGCTACTTTATATAC 224 ò

627 attcaatctatgcatattgatgctactttatatac 661

g

RESULT 38 AAF21344

AAF21344 standard; DNA; 486

AAF21344;

(first entry) 14-MAR-2001

Human low adenosine antisense oligonucleotide related sequence #2911.

Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; bund to the surfactant depletion; respiratory; bronchodilator; antihiflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis;

Homo saplens.

cancer; ss.

WO200062736-A2.

26-0CT-2000.

24-MAR-2000; 2000WO-US08020.

99US-0127958 06-APR-1999;

UYEC-) UNIV EAST CAROLINA. (NYCE/) NYCE J W.

Nyce JW;

WPI; 2000-679539/66.

Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions -

Disclosure; Page 1348-1349; 1592pp; English.

The present invention describes low adenosine (A) content antisense oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator, antilinflammatory, analogsic, manuscuppressive, antiasthmatic, hypotensive and cytostatic activities. Comparisons of the antisense oligonucleotides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with antisense oligonucleotides and malignancies, such as stimulating and activating peptide factors and transmitters, transcription factors. Communoglobulins and antibodies, antibody receptors, cytokines and activating proteins, adhesion molecules and their receptors, cytokine and chemokine receptors, adenosine receptors, bradykinin receptors, central chemokine receptors, adenosine receptors, bradykinin receptors, central cervous system (NS) and peripheral nervous and non-nervous system receptors, adenosine receptors, brading proteins and malignancy associated proteins. The antisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or thing inflammation, allergy(les) and/or surfactant hypoproduction which are associated with a disease or condition selected from pulmonary vasoconstriction, inflammation, allergy(s) pain, cystic fibrosis (CF), allergic rhintis (AR), pulmonary hypertension, emphysema, chronic obstructive pulmonary bronchitis, bronchitis, bronchitis, bronchitis, bronchitis, bronchitis, The present invention describes low adenosine (A) content antisense

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human polynucleotide in the exemplification of
   ind/or cancer. AAF18434 to AAF21543 represent ragments and antisense oligonucleotides used
 and/or cancer. AAF18434
                                   the present invention.
820028
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Sequence 486 BP; 154 A; 81 C; 100 G; 151 T; 0 other;

ö 141 AGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGATCTTATTCAATCTAT 200 0; Gaps Length 486; 0; Indels 100.0%; Pred. No. 1.7e-31; ive 0; Mismatches 0; 17.2%; Score 84; DB 21; 201 GCATATTGATGCTACTTTATATAC 224 84; Conservative Similarity Query Match Local Best Loca Matches 179 ò à g

AAA35222 standard; DNA; 486 AAA35222 RESULT

BP. (first entry) 28-JUL-2000 AAA35222;

Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory; antiallergic antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; CoPD; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss. Human adenosine receptor related polynucleotide 2nd SEQ ID NO:96.

Homo sapiens

WO200009525-A2.

24-FEB-2000.

99WO-US17712 03-AUG-1999; 98US-0095212 03-AUG-1998;

EAST CAROLINA. (UYEC-) UNIV

Nyce JW;

WPI; 2000-205971/18

New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstriction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or

Disclosure; Page 1264; 1343pp; English.

The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which inflammation anteleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antinflammatory, antiallergic, antiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, affects affilict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive

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pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, acarcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ONs reduces side effects. The A-containing ONS break down with the release of deoxydenosine which activates adenosine receptors causing bronchoconstriction and inflammation. AAA33131 to AAA35131 represent the uncleotide sequences juven in the sequence listing from the present throughout, which correspond to SEO ID NO:1 to 2815, but the sequences are also called SEO ID NO:1 to 185, but the sequences differ from the previously named sequences. SEO ID NO:1 to 1680 (AAA32323 to AAA3392) are specifically claimed ONS from the present invention on N. B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEO ID NO: sequences given in the sequence listing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     - which
                                                                                                                                                                                                                                                                                                                                    141 AGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGATCTTATTCAATCTAT 200
                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Interleukin-15; epithelium-derived T-cell factor; T lymphocyte; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Isolated DNA encoding polypeptide with mammalian IL-15 activity stimulates proliferation and differentiation of T cells, used for treating carcinoma(s), melanomas, etc. and viral infections
                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                              17.2%; Score 84; DB 21; Length 486;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          to precursor nts 145-489
                                                                                                                                                                                                                              Sequence 486 BP; 154 A; 81 C; 100 G; 151 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fung V, Grabstein KH;
                                                                                                                                                                                                                                                                                              1.7e-31;
                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human interleukin-15 mature polypeptide.
                                                                                                                                                                                                                                                                                              Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 3; Page 28-29; 48pp; English
                                                                                                                                                                                                                                                                                                                                                                                                    224
                                                                                                                                                                                                                                                                                                                                                                                                                             179 gcatattgatgctactttatatac 202
                                                                                                                                                                                                                                                                              17.2°,
100.0%; Pre
0;
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/note= "claimed"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
                                                                                                                                                                                                                                                                                                                                                                                                  201 GCATATTGATGCTACTTTATATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAT00527 standard; cDNA; 345
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
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                                                                                                                                                                                                                                                                                                            Conservative
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/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (IMMV ) IMMUNEX CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1995-373556/48.
                                                                                                                                                                                                                                                                                         Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    02-FEB-1996
                                                                                                                                                                                                                                                                            Query Match
Best Local Simi
Matches 84;
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cancer; ss
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                                                                                                                                                                                                                                                                                                                                                                                                                         42
                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                 AAF21343
                                                                                                                                                                                                                                                                                                                                                                                                                                                         qq
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A simian species of IL-15 (sIL-15) was purified and its AA sequence analysed (see AAR83309, AAR83436, AAT00524, AAT00525). Both the simian and the human ORFs encode a precursor polypeptide (AAR8436, AAR83438). The precursor polypeptide (AAR8436, AAR8438). The precursor polypeptide (AAR8436, AAR8438). The active encoding mature simian or human IL-15 polypeptides are disclosed in AAR83309 & AAR83310 respectively. The invention also comprises other mammallan IL-15, including human IL-15, that hybridise to probes defined by AAR83438. A plasmid contg. a recombinant clone of human IL-15 convavas and a recombinant clone of human IL-15 convavas and a recombinant clone of human IL-15 in the deposit was named 141-hETF. AAR8315 is a mammallan mature IL-15 polypeptide. It is a generic sequence which encompasses both AAR83309 (simian) and AAR83310 (human) IL-15 mature polypeptides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antibodies that specifically binds epithelium-derived T-cell factor polypeptide useful for e.g. treating or preventing gastrointestinal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Epithelium-derived T-cell factor; ETF; simian; human; enteritis;
gastrointestinal disease; mucositis; peptic ulcer; cytostatic;
villus atrophic disorder; inflammatory bowel disease; antiinflammatory;
                                                                                                                                                                                                                                                   145 AACTGGGTGAATGTAATAAGTGATTTGAAAAATTGAAGATCTTATTCAATCTATGCAT 204
                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rauch C;
                                                                                                                                                                                                     Score 80; DB 16; Length 345;
Pred. No. 1.6e-29;
                                                                                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                               Simian ETF (sETF) mature polypeptide encoding cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fung V,
                                                                                                                                                                        Sequence 345 BP; 121 A; 49 C; 68 G; 107 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      anti-HIV; antiviral; T-lymphocyte stimulator; ss.
                                                                                                                                                                                                16.4%; Scor.
100.0%; Pred. No. ...
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /product= "mature sETF"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                              Bb.
                                                                                                                                                                                                                                                                                                 205 ATTGATGCTACTTTATATAC 224
                                                                                                                                                                                                                                                                                                                                                                             AAF57024 standard; cDNA; 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        95US-0393305.
96US-0725969.
93US-0031399.
94US-0233606.
                                                                                                                                                                                                                                                                                                             61 attgatgctactttatatac 80
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                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                               80; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NPI; 2001-217801/22.
                                                                                                                                                                                                                     Local Similarity
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22-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-NOV-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22-FEB-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                     AAF57024;
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                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                  Matches
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                                                                                                                                                             The invention relates to simian and human epithelium-derived T-cell factor (ETF) polypeptides. Antibodies that specifically bind to the ETF diseases, such as chemotherapy and radiation therapy-induced enterits and mucositis, peptic ulcer disease, villus atrophic disorders and inflammancy bowel disease; for increasing tolerated doses for radiation therapy and chemotherapy agents which are limited by gastrointestinal toxicity; and for treating HIV and HIV-associated diseases. The conditions where it is desired to stimulate proliferation of T-lymphocytes and B lymphocytes, to rube secretion of immorplobulin B lymphocytes, to augment anti-infectious disease immunity, to induce CTL, LAK or NK lytic activity, or to augment the destruction of tumour cells or cells infected with virus. The present sequence represents a CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; businfactant depletion; respiratory; bronchodilator; antifilammatory; immunosuppressive; antiasthmatic; analgasic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                145 AACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGATCTTATTCAATCTATGCAT 204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human low adenosine antisense oligonucleotide related sequence #2910.
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HIV and HIV-associated diseases, augmenting destruction of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 345 BP; 121 A; 49 C; 68 G; 107 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          encoding the simian ETF (SETF) mature polypeptide.
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1.6e-29;
hes 0;
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                                                                                                        Disclosure; Fig 1; 35pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   80; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          40200062736-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      06-APR-1999;
                                   tumour cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-MAR-2001
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99WO-US17712. 98US-0095212

WO200009525-A2. Homo sapiens.

(UYEC-) UNIV EAST CAROLINA

03-AUG-1998; 03-AUG-1999; 24-FEB-2000

WPI; 2000-205971/18.

Nyce JW;

WPI; 2000-679539/66

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The present invention describes low adenosine (A) content antisense oligonucleotides and compositions (I) comprising them. In the antisense coligonucleotides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator, antiinfiammatory, analgesic, immunosuppressive, antiathmatic, hypotensive and cytostatic activities. CC The antisense oligonucleotides and (I) can be used to down-regulate the lung/respiratory disorders and mailgnancies, such as stimulating and cativating peptide factors and mailgnancies, such as stimulating and immunoglobulins and antibodies, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, immunoglobulins and antibodies, antibody receptors, cytokine and creeptors, adenosine receptors, transcription factors, chemokine receptors, adenosine receptors, budding proteins, adenosine receptors, budding proteins and non-nervous system peptide receptors, defensins, growth factors, vasociated proteins. The creeptors, budding proteins and mallinancy associated proteins. The antisense oligonucleotides may be used in this way to treat disorders and antisense oligonucleotides may be used in this way to treat disorders and and/or bronchoconstriction and/or lung inflammation, allergies, asthma, impeded respiratory vasoconstriction, inflammation, allergies, asthma, impeded respiratory vasoconstriction, allergies, asthma, impeded respiratory vasoconstriction, inflammation, allergies, asthma, impeded respiratory vasoconstriction, pulmonary discress syndrome (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary infections, bronchitis, and/or cancer. AAF18414 to AAF21541 represent human polyvucleotide the present invention
                                                       Low adenosine (A) content antisense oligonucleotides which do not
trigger adenosine receptors during metabolism, useful e.g. for treating
cancers and respiratory obstructions -
                                                                                                                                                            Disclosure; Page 1345-1348; 1592pp; English.
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Sequence 14968 BP; 5108 A; 2436 C; 2758 G; 4666 T; 0 other;

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                                                                                             Db 13533 gaggaaaaaatattaaagaatttttgcagagttttgtacatattgtccaaatgttcatc 13592
                                                                                                                                                                                                                                                                                                                                                                                               Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
                                                                             418 GAGGAAAAAAATTTAAAAGAATTTTTGCAGAGTTTTGTACATATTGTCCAAATGTTCATC 477
                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                               Human adenosine receptor related polynucleotide 2nd SEQ ID NO:95.
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                     Length 14968;
Score 72; DB 21; Length 14>
Pred. No. 1.3e-25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
   14.7%; Scc...
100.0%; Pred. No. ...
0; Mismatches
                                                                                                                                                                                                                                                                AAA35221 standard; DNA; 14968 BP
                                                                                                                                                                                                                                                                                                                                   (first entry)
                                             72; Conservative
                                                                                                                                                               478 AACACTTCTTGA 489
                               Best Local Similarity
                                                                                                                                                                                                                                                                                                                                 28-JUL-2000
                                                                                                                                                                                                                                                                                                  AAA35221;
              Query Match
                                                                                                                                                                                                                                RESULT 43
                                             Matches
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The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which cargets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic, antiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease associated with inflammation, impaired airways, including lung disease associated with inflammation, impaired airways, including lung disease associated with inflammation, ceffects afflict the lungs of a subject. They can be used for treating e.g. ischamic conditions, pulmonary vasconstriction, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive culmonary disease (CODP), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including the order of prostate cancer. The reduction of the adenosine content of the one prostate cancer. The A-containing ONS break down with the release of deoxyadenosine which activates adenosine receptors causing nucleotide sequences given in the sequences listing from the prevent invention, which correspond to SEO ID NO:1 to 2815, and then present convention, which correspond to SEO ID NO:1 to 1885, but the sequences differ from the previously mammed sequences. SEO ID NO:11 to 1680 (AAA33232 to AAA33323 to AAA3332 to AAA33323 to AA
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                                                                                                                                                                                                                                                                                                                                                           New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstriction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
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1.3e-25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 1260-1264; 1343pp; English.
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RESULT
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Human; interleukin 15; IL-15; gene therapy; chromosome 4q31; infection; drug screening; anthropological lineage; paternity testing; HIV; Human Immunodeficiency Virus; forensic application; T-cell leukaemia; ds.
                                                                                                                                                                                                                                                                                                                                                                            (5'site:NO, 3'site:NO)
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                                                                                                          /cons_splice= (5'site:NO, 3'site:NO)
                                                                                                                                                                 (5'site:NO, 3'site:NO)
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                                                                                    /product= "Human IL-15 protein"
                                                             Location/Qualifiers
347..13604
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/*tag= v
replace (1536, A)
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10740.13492
/*tag 1
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/cons_splice (1
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2807..2892
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/number= 5
10603..10739
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13605..14968
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3741..10602
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1351..1448
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347..357
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358..1350
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Human IL-15 gene allele.
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The present sequence is human interleukin-15 (IL-15) gene allele located on chromosome 4q31. The polymorphic variants of IL-15 genes are useful for studying the expression and function of IL-15 ade appression and function of IL-15 and expressing to IL-15 protein for screening for candidate drugs to IL-15 protein for screening for candidate drugs to IL-15 protein for screening for candidate drugs to IL-15 polymorphic sites are useful for studying propulation diversity, anthropological lineage, the significance of individual at the novel IL-15 polymorphic sites are useful for studying population and incapped of the phenotypic level, paternity testing, conversity and lineage of the phenotypic level, paternity testing, conversity and lineage of the phenotypic level, paternity testing, conversity and a trait such as level of drug response or susceptibility to disease. Identifying association between IL-15 genetic variation and a trait, is useful for developing diagnostic tests and therapeutic treatments for infections, human immunodeficiency virus and therapeutic treatments for infections, human immunodeficiency virus and therapeutic propore and a genotype or haplotype pair) for the IL-15 gene may be the basis for designing a diagnostic method to determine those individuals who will or will not respond to the treatment, or alternatively, will respond at a lower level and thus may require more treatment, i.e. a greater dose of a drug. The genotyping or haplotyping methods are also useful for developing drugs testing to the individual more controlled in the testing method are also useful for developing drugs testing to the formal controlled in dealgraing controlled in gene therapy. Expression of function of novel IL-15 stogene may be turned off or the long of the ingene therapy. Expression of an IL-15 isogene may be turned off or the long of the long of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel polynucleotides comprising one of 11, PSI-PS11, single nucleotide polymorphisms in human interleukin-15 gene, and useful for treating disorders affected by expression of function of interleukin-15 isogene
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P-PSDB; AAE08576.
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Best Local Similarity
Matches 72; Conserv
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Human; interleukin 15; IL-15; gene therapy; chromosome 4q31; infection;
drug screening; anthropological lineage; paternity testing; HIV;
Human Immunodeficiency Virus; forensic application; T-cell leukaemia; ds.
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"This degenerate base represents polymorphic site"
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                                                                                                                                                         location/Qualifiers
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                                                                     Human interleukin 15 (IL-15) gene.
        AAD15838 standard; DNA; 14968 BP.
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for studying the expression and function of IL-15 and expressing

C IL-15 protein for use in useful for screening for candidate drugs to

treat diseases related to IL-15 activity. Genotyping or haplotyping an

individual at the novel IL-15 polymorphic sites are useful for studying

c diversity and lineage of the phenotypic level, patentity testing,

c diversity and lineage of the phenotypic level, patentity testing,

c forensic applications and for identifying associations between IL-15

genetic variation and a trait such as level of drug response or

cs usceptibility to disease. Identifying an association between a genotype

cor haplotype and a trait, is useful for developing diagnostic tests and

therapeutic treatments for infections, human immunodeficiency virus and

cor haplotype and a genotype or haplotype (or haplotype pair) for the IL-15

gene may be the basis for designing a diagnostic method to determine

c response and a genotype or haplotype (or haplotype pair) for the IL-15

gene may be the basis for designing a diagnostic method to determine

those individuals who will or will not respond to the treatment,

c alternatively, will respond at a lower level and thus may require more

treatment, i.e. a greater dose of a drug. The genotyping or haplotyping

methods are also useful for therapeutic purposes for treating

c methods are also useful for therapeutic purposes for treating

c disorders affected by expression of function of novel IL-15 isogene and

c also in gene therapy. Expression of an IL-15 isogene may be turned off

by transforming a targetted organ, tissue or cell population of an

c hand is account that expresses high levels of untranslatable mRNA for

the contract of the pagented organ, tissue or cell population of an
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1.3e-25;
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ID AAL25950 standard; cDNA; 384 BP.
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14-MAR-2000;
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09-JUN-2000;
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Wang Y, Steinmann K;

Xu Y,

Lillie J,

The present sequence is human interleukin-15 (IL-15) gene located on chromosome 4q31. The polymorphic variants of IL-15 genes are useful

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The invention relates to human breast cancer expressed polynucleotides (AALO7544-AAL26789) and methods of assessing whether a patient is afflicted with breast cancer by examining the correlation between the expression of certain markers and the cancerous state of breast cells. The polynucleotides and encoded polypeptides are potential markers for detecting, diagnosing, monitoring, characterising treating and
                                                                                                       The invention relates to human breast cancer expressed polynucleotides (AAL07544-AAL26789) and methods of assessing whether a patient is affilicted with breast cancer by examining the correlation between the expression of certain markers and the cancerous state of breast cells.
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                                         New peptide useful as a marker for the diagnosis of breast cancer
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Pred. No. 0.00021;
0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                   67 G; 127 T; 1 other;
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                                                                         Page 3400; 3695pp; English.
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2000US-0192099.
2000US-0193480.
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potentially preventing breast cancer. The polynucleotides and encoded polypeptides are also useful for isolating compounds with cytostatic activity.
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                                                                                                   Length 474;
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                                                         Sequence 474 BP; 155 A; 76 C; 87 G; 155 T; 1 other;
                                                                                                                                                                                                                                                                                                                                                                           Human; breast cancer; cell marker; cytostatic; ss.
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                                                                                                                                                                                                                                                                                                                                              Human breast cancer expressed polynucleotide 662.
                                                                                                   5.9%; Score 29; DB 22; 00.0%; Pred. No. 0.00021;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match 5.9%; Score 29; DB Best Local Similarity 100.0%; Pred. No. 0.0 Matches 29; Conservative 0; Mismatches
                                                                                                           100.0%; Pred. ...
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                                                                                                                                                           461 TTGTCCAAATGTTCATCAACACTTCTTGA 489
                                                                                                                                                                          279 TTGTCCAAATGTTCATCAACACTTCTTGA 251
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                                                                                                                                                                                                                                                            ВР
                                                                                                                                                                                                                                                            AAL08205 standard; cDNA; 506
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2000US-0205230
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2000US-0192099
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                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                      Query Match 5.99
Best Local Similarity 100.
Matches 29; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
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24-MAR-2000;
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invention have anti-Lis, anti-inflammatory, hepatotropic, invention have anti-Lis, anti-inflammatory, hepatotropic, anti-inflammatory, hepatotropic, anti-inflammatory, hepatotropic, anti-inflammatory, hepatotropic, and can be used for gene therapy. The antisense oligonucleotides are used to inhibit interleukin-15 (IL-15) expression and production, and prevent the recruitment and activation of macrophages. They are used to treat diseases associated with an increased expression of IL-15. Such diseases architis, cirrhosis, multiple sclerosis, chronic liver disease, ulcerative colitis and cell proliferative disorders. The treatment may be in vivo or ex vivo. The antisense oligonucleotides of the invention expecipic for interleukin-15 (IL-15), and can be delivered expressed from DNA or RNA vectors. ASSB709-288723 represent the antisense ligonucleotides distlemented of the
                                                                                                                                                                                                                                                                                                      IL-15; interleukin 15; human; anti-IL15; anti-inflammatory; hepatotropic; anti-arthritic; neuroprotective; antiprolliferative; antiulcer; antisense; gene therapy; mecrophage; inflammatory disorder; bowel disease; primer; arthritis; cirrhosis; multiple sclerosis; chronic liver disease; ulcerative colitis; cell proliferative disorder; treatment; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel antisense oligonucleotides targeted to interleukin-15 used to treat inflammatory diseases and cell proliferative diseases such as inflammatory bowel disease and chronic liver disease -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes novel antisense oligonucleotides of
                                                                                                                                                                                                                         Human IL-15 targetted antisense oligonucleotide HCL-106.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 12; Fig 2; 52pp; English.
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                                                                                                                                       11-MAY-2000 (first entry)
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Invention have anti-inflamatory, hepatotropic, anti-arthritic, neuroprotective, antiproliferative and antiulcer activity and can be used for gene therapy. The antisense oligonucleotides are used to thibit interleukin-15 (IL-15) expression and production, and prevent the recruitment and activation of macrophages. They are used to treat diseases associated with an increased expression of IL-15. Such diseases include inflammatory disorders, such as inflammatory bowel disease.

Include inflammatory disorders, such as inflammatory bowel disease, arthritis, cirrhosis, multiple sclerosis, chronic liver disease, clearthis colitis and cell proliferative disorders. The treatment may be in vivo or ex vivo. The antisense oligonucleotides of the invention exogenously or can be expressed from DNA or RNA vectors. AA288709 288723 represent the antisense ligonucleotides disclosed in the method of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            anti-arthritic; neuroprotective; antiproliferative; antiulcer; antisense; gene therapy; macrophage; inflammatory disorder; bowel disease; primer; arthritis; cirrhosis; multiple sclerosis; chronic liver disease; ulcerative colitis; cell proliferative disorder; treatment; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IL-15; interleukin 15; human; anti-IL15; anti-inflammatory; hepatotropic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel antisense oligonucleotides targeted to interleukin-15 used to treat inflammatory diseases and cell proliferative diseases such as inflammatory bowel disease and chronic liver disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human IL-15 targetted antisense oligonucleotide HCL-103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nozawa I;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hamanaka S, Hiroyuki K,
315 TIGICCAAAIGTICAICAACACITCTIGA 287
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Hiroyuki K,

98US-0091873. 99WO-US15499

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                                                          DB 21; Length 25; 0.19;
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                       Sequence 25 BP; 6 A; 6 C; 6 G; 7 T; 0 other;
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1 ATGAGAATTTCGAAACCACATTTGAGA

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AAZ88714/c ID AAZ88714 standard; cDNA; 25

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RESULT

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125782 Sequence 1
12885 Sequence 4
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119887 Sequence 13
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AF108148 F
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HSDNAIL15
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HSILLI5MR
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         GenCore version 4.5
Copyright (c) 1993 - 2000 Compugen Ltd
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Grabstein, K.H., Anderson, D.M., Eisenman, J.R., Fung, V. and
Method of treatment with epithelium derived T-cell factor
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Grabstein, K.H., Anderson, D.M., Eisenman, J.R., I
Epithelium-darived T-cell factor antibodies
Patent: US 5892001-A 4 06-APR-1999;
Location/Qualifiers
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PAT 07-SEP-2000

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AR122867.1 GI:14107833
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AR125104.1 GI:14111166
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Grabstein, K. H., Pettit, D. K. and Paxton, R. J.
Antagonists of interleukin.15
Patent: US 6165466-A 1 26-DEC-2000;
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Londel,M., Quaratino,S. and Maiuri,L.
Treatment of cellac disease with interleukin-15 antagonists
Patent: WO 00005582-A 3 20-JAN-2000;
LONDEI MARCO (GB); QUARATINO SONIA (GB); MATHILDA AND TERENCE
KENNEDY I (GB); MAIURI LUIGI (IT)
LOCATION/QUALIFIERS
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1 (bases 1 to 489)
Grabstein, K.H., Pettit, D.K. and Paxton, R.J.
Antagonists of interleukin-15
Patent: US 6177079-A 1 23-JAN-2001;
Location/Qualifiers
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Pred. No. 8e-244;
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AX006785.1 GI:9994821
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Grabstein, K., Anderson, D., Eisenman, J., Fung, V. and Rauch, C.
DNA encoding epithelium-derived T-cell factor
Patent: US 5552303-A 1 03-SEP-1996;
                                                 GCAGGGCTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATT
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100.0%; Score 489; DB 6;
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ive 0; Mismatches 0
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125782.1 GI:1605652
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81 c 92 g
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(bases 1 to 489)
Grabstein, K.H., Anderson, D.M., Elsenman, J.R., Fung, V. and Rauch, C. Grabstein, K.H., Anderson, D.M., Elsenman, J.R., Fung, V. and Rauch, C. method for treating or preventing gastrointestinal disease with epithelium-derived T-cell factor Patent: US 5707616-A 4 13-JAN-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361 ATCTTGTCTTCTAATGGGAATATAACAGAATCTGGATGCAAAGAATGTGAGGAACTAGAG 420
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                                              CCCAGTTGCAAGGTAACAGCAATGAAGTGCTTTCTCTTGGAGTTGCAAGTTATTTCACAT
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Grabstein, K. H., Anderson, D. M., Eisenman, J. R., Fung, V. and Rauch, C.
Epithelium-derived T-cell factor
Patent: US 5574138-A 4 12-NOV-1996;
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489; Conservative
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                                                                                                                                                                                    PRI 25-MAY-1994 complete cds.
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KTEANWYNVISDLKKIEDLIQSMHIDATLYTESDVHPSCKVTAMKCFLLELQVISHES
GDTDIHDTVENLIILANNILSSNGNITESGCKECEELEEKNIKEFLQSFVHIVQMFIN
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1 (bases 1 to 1275)
Submitted (02-NOV-1993) Dirk M. Anderson, Immunex Research and Development Corp., 51 University St., Seattle, WA 98101, USA Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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/db_xef="texon:9534"
/cell_line="CV1/EBNA"
/cell_type="epithelial"
/tissue_type="kidney"
/function="T cell growth factor"
/note="secreted protein"
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/protein_id="AAA18416.1"
/db_xref="GI:493522"
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264 c 278 g 3
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KTEANWVNVISDLKKIEDLIQSMHIDATLYTESDVHPSCKVTAMKCFLLELQVISHES
GDTDIHDTVENLIILANNILSSNGNITESGCKECEELEEKNIKEFLQSFVHIVQMFIN
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1 (bases 1 to 492)
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Submitted (20-JAN-1997) Masashi Tatsumi, National Institute
Health, Department of Veterinary Science; Toyamal-22-1,
Shinjuku-ku, Tokyo 162, Japan (E-mail:tatsu@nih.go.jp,
Tel:81-3-5285-1111, Fax:81-3-5285-1179)
                                                                                                                                       121 GCAGGGCTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAATT
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/cell_type="peripheral blood mononuclear cells"
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Macaca fascicularis mRNA for interleukin-15 precursor,
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/db_xref="G1:1799530"
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/product="interleukin-15"
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GDTDIHDTVENLIILANNILSSNGNITESGCKECEELEEKNIKEFLQSFVHIVQMFIN
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Unclassified.
Unclassified.
( bases 1 to 345)
Grabstein.K.H., Anderson.D.M., Eisenman.J.R., Fung,V. and Rauch,C. Epithelium-derived T-cell factor antibodies
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Sequence 13 from patent US 5892001.
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/tissue_type="blood"
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423; Conservative 0;
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                       /gene="IL-15"
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Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
Cercopithecinae; Macaca.
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Villinger,F., Brar,S.S., Mayne,A., Chikkala,N. and Ansari,A.A. Comparative sequence analysis of cytokine genes from human and nonhuman primates
J. Immunol. 155 (8), 3946-3954 (1995)
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Масаса mulatta interleukin-15 (IL-15) mRNA, complete cds.
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Pathology, 1327 Clifton Rd, Atlanta, GA 30322,
                                                                                    tch 86.5%; Score 423; DB 9; L al Similarity 100.0%; Pred. No. 2.1e-209; 423; Conservative 0; Mismatches 0;
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/product="IL-15"
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Villinger, F.J.
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Grabstein, K.H., Anderson, D.M., Eisenman, J.R., Fung, V. and Rauch, C.
Method of treatment with epithelium derived T-cell factor
Patent: US 5982A6.2-A 31 6-NOV-1999;
Location/Qualifiers
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100.0%; Pred. No. 1e-168;
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Patent: US 5892001-A 13 06-A
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PAT 06-FEB-1997
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Grabstein, K.H., Anderson, D.M., Eisenman, J.R., Fung, V. and Rauch, C. Epithelium-derived T-cell factor
Patent: US 5574138-A 13 12-NOV-1996;
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           GATACAGTAGAAAATCTTATCATCCTAGCAAACAACATCTTGTCTTCTAATGGGAATATA
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Sequence 13 from patent US 5707616.
179227
179227.1 GI:3207517
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US 5574138,
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                     /product="interleukin-15"
/product="interleukin-15"
/protein_id="CAA86100.1"
/protein_id="CI:995657"
/d_xxef="CI:995657"
/translation="wwwwwysplkkiedLiQSMHIDATLYTESDVHPSCKVTAMKCFLLELQVISLESCDASIHDTVENNSLSSNGNVTESGGKECEELEEKNIKEFLOS
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Pred. No. 1.2e-44;
0; Mismatches 1; Indels
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Grabstein, K. H. and Widmer, M.B.
Vaccine adjuvant comprising interleukin-15
Patent: US 5747024-A 4 05-MAY-1998;
Location/Qualifiers
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Pred. No. 1.2e-44;
0; Mismatches 1;
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Sequence 2 from patent US 5795966.
AR024349.1 GI:3977643
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Sequence 4 from patent US 5747024.
AR004268.
AR004268.1 GI:3965147
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79 c 95 g
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            /codon_start=1
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21.9%;
Best Local Similarity 99.4%;
Matches 157; Conservative
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Best Local Similarity 99.4%;
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Unclassified.

1 (bases 1 to 345)

2 (abstein, R.H., Anderson, D.M., Eisenman, J.R., Fung, V. and Rauch, C. Method for treating or preventing gastrointestinal disease with epithelium-derived T-cell factor
Patent: US 5707616-A 13 13-JAN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 111 to 452)
                                                                                                                                                                                                                                                                                    265 AAGTGCTTTCTCTTGGAGTTGCAAGTTATTTCACATGAGTCCGGAGATACAGATATTCAT 324
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SOREL, M.A.

Direct Submission

Submitted (03-OCT-1994) Michel A Sorel, Institut de biologie,

INSERM U 211, 9 Quai de Moncousu, Nantes, 44035, FRANCE

Location/Qualifiers
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H.sapiens mRNA for interleukin 15 (partial).
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IL15 expression in human keratinocytes
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/organism="Homo sapiens"
/isolate="INDIVIDUAL"
/db_xref="taxon:9606"
/sex="Male"
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                                                                                                       /organism="unknown"
50 c 64 q
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interleukin; interleukin-15.
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(Lobase 1 to 489)

Grabstein, K.H., Anderson, D.M., Eisenman, J.R., Fung, V. and Rauch, C. Method of treatment with epithelium derived T-cell factor Patent: US 5985262-A 1 16-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                 67 AGTCATTITCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
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Pred. No. 1.2e-44;
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Strom.T.B. and Maslinski,W.
Antagonists of interleukin-15
Patent: US 6001973-A 5 14-DEC-1999;
Location/Qualifiers
         5985262.
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Sequence 5 from patent US 6001973.
AR094649
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79 c 95 g
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AR085740
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Best Local Similarity 99.4%;
Matches 157; Conservative
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Cabbtenin,K.H., Anderson,D.M., Bisenman,J.R., Fung,V. and Rauch,C.
Epithelium-derived T-cell factor antibodies
Patent: US 5892001-A 1 06-APR-1999;
                                                                                                                                                                                                                                                                                                   67 AGTCATITICTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
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Pred. No. 1.2e-44;
0; Mismatches 1; Indels
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1 (bases 1 to 489)
Grabstein,K.H., Pettit,D.K. and Paxton,R.J.
Antagonists of interleukin-15
Patent: US 5795966-A 2 18-AUG-1998;
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Best Local Similarity 99.4%;
Matches 157; Conservative (
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Patent: US 6177079-A 2 23-JAN-2001;
Location/Qualifiers
                                                                                                                                                                                  1 (bases 1 to 489)
Grabstein,K.H., Pettit,D.K. and Paxton,R.J.
Antagonists of interleukin-15
Patent: US 6168783-A 2 02-JAN-2001;
Location/Qualifiers
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Best Local Similarity 99.4%; Pred. No. 1.2e-44;
Matches 157; Conservative 0; Mismatches 1;
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Pred. No. 1.2e-44;
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187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
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Sequence 2 from patent US 6177079.
AR125105
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Sequence 2 from patent US 6168783.
AR122868
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Best Local Similarity 99.4%;
Matches 157; Conservative
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Pred. No. 1.2e-44;
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Pred. No. 1.2e-44;
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Grabstein,K.H., Pettit,D.K. and Paxton,R.J.
Antagonists of interleukin-15
Patent: US 6165466-A 2 26-DEC-2000;
Location/Qualifiers
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Strom.T.B. and Maslinski,W.
Antagonists of interleukin-15
Patent: US 6001973-A 7 14-DEC-1999;
                          489 bp
Sequence 7 from patent US 6001973.
AR094650
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Sequence 2 from patent US 6165466.
AR122046
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Best Local Similarity 99.4%;
Matches 157; Conservative
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PAT 14-DEC-2001

Euteleostomi;

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/translation="MRISKPHLRSISIQCYLCLLLNSHFLTEAGIHVFILGCFSAGLP
KTEANWVNVISDLKKIEDLIQSMHIDATLYTESDVHPSCKVTAMKCFLLELQVISLES
GDASIHDTVENLIILANNSLSSNGNVTESGCKECEELEEKNIKEFLQSFVHIVQMFIN
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KTEANWVNVISDLKKIEDLIQSMHIDATLYTESDVHPSCKVTAMKCFILELOVISLES
GDASIHDTVENLIILANNSLSSNGNVTESGCKECEELEEKNIKEFLDSFVHIVDMFIN
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Strom_T.B. and Maslinski,W.

Compositions and methods for achieving immune suppression

Patent: WO 018730-A 3 22-NOV-2001;

Beth Israel Deaconess Medical Center, Inc. (US)

Location/Qualifiers
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Bukaryota: Metazoa; Chordata; Craniata; Vertebrata; Butel:
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo
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Pred. No. 1.2e-44;
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Pred. No. 1.2e-44;
0; Mismatches 1;
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/protein_id="CAD19390.1"
/db_xref="G1:17901653"
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/organism="Homo sapiens"
/db_xref="taxon:9606"
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Sequence 3 from Patent WO0187330.
AX320244 GI:17901652
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
I (Dases 1 to 489)
Londei, M., Quaratino, S. and Maiuri, L.
Treatment of celiac disease with interleukin-15 antagonists
Patent: WO 0002582-A 20-JAN-2000;
LONDEI MARCO (GB); QUARATINO SONIA (GB); MATHILDA AND TERENCE
KENNEDY I (GB); MAIURI LUIGI (IT)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
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Beth Israel Deaconess Medical Center, Inc. (US)
Location/Qualifiers
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Pred. No. 1.2e-44;
0; Mismatches 1;
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/codon_start=1
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/db_xref="G1:17901651"
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/db_xref="taxon:9606"
79 c 95 g 156
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/db_xref="taxon:9606"
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Strom, T.B. and Maslinski, W.
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99.4%;
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AX006786
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linear PAT 07-0CT-1996
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Grabstein, K., Anderson, D., Eisenman, J., Fung, V. and Rauch, C.
DNA encoding epithelium-derived T-cell factor
Patent: US 5552303-A 4 03-SEP-1996;
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0
PR 26-APR-1996 US 60/016634
PI TERRY STROM WLODZIMERZ MASLINSKI
Strandedness: Single;
CC Topology: Linear;
FH Key
Location/Qualifiers
L1 489
FT source
L /Organism='Unidentified',
                                                                                                                                                                                                                                                                                                                                      21.9%; Score 107; DB 6; Length 489; 99.4%; Pred. No. 1.2e-44; Live 0; Mismatches 1; Indels
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Pred. No. 1.2e-44;
0; Mismatches 1; Indels
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80 c 96 g
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Best Local Similarity 99.4%;
Matches 157; Conservative (
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Strom, T. and Maslinski, W.
Anteqonists of interleukin-15
Anteqonists of interleukin-15
Anteqonists of interleukin-15
Datent: JP 200150521-A, 4 27-FEB-2001;
BETH ISRAEL DEACONESS MEDICAL CENTER
OS Unidentified
PN JP 2001505221-A/4
PD 27-FEB-2001
PF 25-APR-1997 JP 1997539046
PR 26-APR-1990 US 60/016634
PR 26-APR-1996 US 60/016634
PR 26-APR-1999 LS CONTIS CONTI
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Strom, T. and Maslinski, W.
Antagonists of interleukin-15
Patent: JP 2001502521-A 5 27-FEB-2001;
BETH ISRAEL DEACONESS MEDICAL CENTER
OS Unidentified
PN JP 2001502521-A/5
PD 27-FEB-2001
PF 25-APR-1997 JP 1997539046
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    489
    /organism="unidentified"

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80 c 95 g
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BD008812
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                                                                        1 (bases 1 to 489)
Grabstein,K.H., Anderson,D.M., Eisenman,J.R., Fung,V. and Rauch,C. Epithelium-derived T-cell factor
Patent: US 5574138-A 1 12-NOV-1996;
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Grabstein,K.H., Quinn,L.S. and Troutt,A.B.
Muscle trophic factor
Patent: US 5660824-A 1 26-AUG-1997;
                                                                                                                                                                                 Score 107; DB 6;
Pred. No. 1.2e-44;
0; Mismatches 1;
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Pred. No. 1.2e-44;
0; Mismatches 1;
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162692.
162692.1 GI:2480400
489 bp
Sequence 1 from patent US 5574138.
128849
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79 c 95 g
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                                                                                                    Unclassified.

1 (bases 1 to 489)
Grabstein, K.H., Anderson, D.M., Bisenman, J.R., Fung, V. and Rauch, C. Method for treating or preventing gastrointestinal disease with epithelium-derived F-cell factor
Patent: US 5707616-A 113-JAN-1998;
                                                                                                                                                                                                                                                                                                                                                                    127 CTCCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGAT 186
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Pred. No. 1.2e-44;
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Veerapaneni, D., Hamanaka, S. and Nozawa, I.
Ribozymes targeted to human IL-15 mRNA
Patent: US 6087172-A 11 11-JUL-2000;
Location/Qualifiers
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Pred. No. 1e-44;
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Sequence 11 from patent US 6087172.
489 bp Sequence 1 from patent US 5707616.
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AR103280.1 GI:12814868
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Matches 157; Conservative
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Matches 157; Conservative
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GDASIHDTVENLIILANNSLSSNGNVTESGCKECEELEEKNIKEFLQSFVHIVQMFIN
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1202)
Grabstein, K.K., Eisenman, J., Sheanebeck, K., Rauch, C.,
Srinivasan, S., Fung, V., Beers, C., Richardson, J., Schoenborn, M.A.,
Ahdieh, M., Johnson, L., Alderson, M.R., Watson, J.D., Anderson, D.M.
and Giri, J.G.
Cloning of a T cell growth factor that interacts with the beta
Cloning of the interleukin-2 receptor
Science 264 (5161), 965-968 (1994)
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2 (bases 1) M
Anderson, D.M.
Direct Submission
Submitted (06-SEP-1994) Dirk M. Anderson, Immunex Research and Development Corp., 51, University St., Seattle, WA 98101, USA Location/Qualifiers
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/tissue_type="Bone marrow"
1. .1202
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314. .460
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Compositions and methods for producing antigen-presenting cells
Patent: WO 0185920-A 1 15-NOV-2001;
Baylor Research Institute (US)
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Douvdevani, A. and Chalmovitz, C.
Antisense oligomer
Patent: WO 0028019-A 1 18-MAY-2000;
MOR RESEARCH APPLIC LTD (IL); DOUVDEVANI AMOS (IL); UNIV BEN
GURION (IL); CRAIMOVITZ CIDIO (IL)
Location/Qualifiers
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317.805
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Sequence 1 from Patent W00028019.
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Bukaryota; Metazoa; Chordates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 643)
Meazsaa, R., Verdiani,S., Biassoni,R., Coppolecchia,M., Gaggero,A.,
Orengo,A.M., Colombo,M.P., Azzarone,B. and Ferrini,S.
Identification of a novel interleukin-15 (IL-15) transcript isoform
generated by alternative splicing in human small cell lung cancer
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                                                                                                                                                                                                                                                                                      67 AGICATITICTAACIGAAGCIGGCATICATGTCTICATITIGGGCIGTITCAGTGCAGGG 126
                                                                                                                                                                                                                                                                                                       CTCCCTAAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGAT 186
                                                                                                                                                                                                                                                                                                                                                              Direct Submission
Submitted (12-DEC-1995) S. Ferrini, Istituto Nazionale Ricerca Cancro, Pharmacology, Largo R. Benzi 10, Genova, 16132, Italy Location/Qualifiers
1. .643
//srganism="Homo sapiens"
//srganism="Homo sapiens"
                                                                                                                                                                                                                                                                    Gaps
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                                                                                                                                                                                                                                     Length 1202;
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H.sapiens mRNA for interleukin-15 (cell line NCIH69).
X94222
                                                                                                                                                                                                                                                               1; Indels
                                                                                                              /note="encodes N-glycosylation site" 794. .802
/gene="IL15"
                                                          /note="encodes N-glycosylation site"
695. .703
                                                                                                                                                        /note="encodes N-glycosylation site"
219 c 249 g 379 t
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/db_xref="SWISS-PROT:P40933"
                                                                                                                                                                                                                               Score 107; DB 9;
Pred. No. 1e-44;
0; Mismatches 1;
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/clone="1"
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/tissue_type="SCLC"
/clone_lib="H69"
/dev_stage="adult"
                          /product="unnamed"
671. .678
/gene="IL15"
               /note="putative"
                                                                                    695. .703
/gene="IL15"
                                                                                                                                                                                                                                21.9%;
99.4%;
/gene="IL15"
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DEFINITION
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ORGANISM
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HSIL15MR1
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Bukaryotza, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia; Eutheria, Primates, Catarrhini, Hominidae, Homo.

1 (bases 1 to 643)

Meazaa, R., Verdiani, S., Biassoni, R., Coppolecchia, M., Gaggero, A., Orengo, A.M., Colombo, M.P., Azzarone, B. and Ferrini, S. Identification of a novel interleukin.15 (IL-15) transcript isoform generated by alternative splicing in human small cell lung cancer
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TLYTESDVHPSCKVTAMKCFILELQVISLESGDASIHDTVENLIILANNSLSSNGNVT
ESGCKECEELEEKNIKEFLQSFVHIVQMFINTS"
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                                                                                                                                                          130 CCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGATCTT 189
                                                                                                                                                                                  Direct Submission
Submitted (12-DEC-1995) S. Ferrini, Istituto Nazionale Ricerca
Cancro, Pharmacology, Largo R. Benzi 10, Genova, 16132, Italy
Location/Qualifiers
1. .643
/organism="Homo sapiens"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    271 CCTAAAAACAGAAAGCCAACTGGGTGAATGTAATAAGTGATTGAAAAAATTGAAGATCTT 330
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0
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H.sapiens mRNA for interleukin-15 (cell line NCIH82).
                                                                                    Length 643;
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/product="interleukin-15 (IL-15)"
/db_xref="GI:1495462"
/db_xref="GI:1495462"
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                                                                                Score 95; DB 9; Le
Pred. No. 2e-38;
); Mismatches 0;
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2e-38;
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                                                                                                                                                                                                                                                                     331 ATTCAATCTATGCATATTGATGCTACTTTATATAC 365
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100.0%; Pred. No. ac
'-- 0; Mismatches
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/db_xref="teaxon.9606"
/cell_line="NCIH82"
/tissue_type="SCLC"
/clone_lib="H82-1,-2"
/dev_stage="adult"
233. 630
123 g
                                                               19.4%; Scc.
100.0%; Pre
                                                                                                                                                                                                                                                                                                                                                                                                                                                         GI:1495461
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Ferrini, S.
111 c
                                                                                                                       Conservative
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Best Local Similarity 100.
Matches 95; Conservative
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LOCUS

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/codon_start=1
/product=interleukin 15 precursor"
/product=interleukin 15 precursor"
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/db_xref="G1:2739160"
/db_xref="G1:2739160"
/tb_xref="G1:2739160"
/db_xref="G1:2739160"
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Ferrini, S.
Direct Submission
Submitted (08-APR-1997) S. Ferrini, IST, Immunopharmacology, Largo
R. Benzi 10, Genova, 16132, ITALY
revised by author
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
Bukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostoml;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 486)
Expassion of two Ii-I5 mRNA isoforms in human tumors does not correlate with secretion; role of different signal peptides
ref. Jerpseth, J., et al., Strategies 5(1), 1992"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        519. .926
/gene="IL-15"
/function="T cell/NK cell/mast cell growth factor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 1248;
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1.8e-38;
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/gene="IL-15"
/note="short signal peptide"
/evidence=experimental
582. 923
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/db_xref="GI:2143256"
/db_xref="SPTREMBL:000440"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       419
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/db_xref="taxon:9606"
57. .467
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209 c 223 g
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                                                                                                                                         /note="lymphokine"
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57. .467
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                        1. .1248
/gene="IL-15"
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Matches 95; Conserv
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VERSION
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SOURCE
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REFERENCE
AUTHORS
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/db_xref="taxon:9606"
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Bokaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Bokaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.

1 (basea 1 to 1248)

1 Tagaya, Y., Kurys, G., Thies, T.A., Losi, J.M., Azimi, N., Hanover, J.A., Bamford, R.N. and Waldmann, T.A.

Generation of secretable and nonsecretable interleukin 15 isoforms through alternate usage of signal peptides

Proc. Natl. Acad. Sci. U.S.A. 94 (26), 14444-14449 (1997)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (22-OCT-1997) Metabolism Branch, National Cancer
Institute, Bldg. 10 /Rm. 4B 47, 9000 Rockville Pike, Bethesda,
20892, USA
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100.0%; Pred. No. 1.8e-38;
tive 0; Mismatches 0;
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Bennett, C.Frank and Cowsert, L.M.
Antisense inhibition of interleukin-15 attent: US 598563-A 1 16-NOV-1999;
Location/Qualifiers
1. .1248
                                                                                                                                                                                                 DNA
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                                                                                                                                                                                   AR087004 1248 bp
Sequence 1 from patent US 5985663.
AR087004
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209 c 223 g
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1 (bases 1 to 345)
Grabstein,K.H., Anderson,D.M., Eisenman,J.R., Fung,V. and Rauch,C. Epithelium-derived T-cell factor antibodies
Patent: US 58921001-A 12 06-APR-1999;
Location/Qualifiers
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Grabstein,K.H., Anderson,D.M., Eisenman,J.R., Fung,V. and Rauch,C. Method of treatment with epithelium derived T-cell factor Patent: US 5985262-A 12 16-NOV-1999;
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Grabstein, K.H., Anderson, D.M., Eisenman, J.R., Fung, V. and Rauch, C.
Epithelium-derived T-cell factor
Patent: US 5574138-A 12 12 NOV-1996;
Location/Qualifiers
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Grabstein, K. H., Anderson, D. M., Eisenman, J. R., Fung, V. and Rauch, C. Method for treating or preventing gastrointestinal disease with epithelium-derived T-cell factor Patent: US 5707616-A 12 13-JAN-1998;
                                                   145 AACTGGGTGAATGTAATAAGTGATTTGAAAAATTGAAGATCTTATTCAATCTATGCAT 204
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CTAAACAGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGT 120
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APPLICANT: Grabstein, Kenneth
APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Eisenman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR
NUMBER OF SEQUENCES: 15
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COMPUTER: IBM PC compatible
COMPUTER: SYSTEM: PC-OOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
FILING DATE: 22-FEB-1995
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
                                                        Score 489; DB 1; I
Pred. No. 7.1e-220;
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6300 Columbia Center, 701 Fifth Avenue
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                                         100.0%; Scc...
100.0%; Pred. No. ...
0; Mismatches
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Patent No. 5574138
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Best Local Similarity 100.
Matches 489; Conservative
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ADDRESSEE: Seed and
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COMPUTER READABLE FORM:
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CITY: Seattle
STATE: Washington
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APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Elsenman, June
APPLICANT: Estenman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: Epithelium-derived T-cell Factor
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/031,399
FILING DATE: 19930308
CLASSIFICATION: 530
US-09-439-313-8
US-07-706-691G-53
US-07-706-691G-55
US-07-706-691G-55
US-07-706-691G-55
US-07-706-691G-59
US-07-706-691G-69
US-07-706-691G-61
US-07-706-691G-62
US-07-706-691G-62
US-07-706-691G-62
US-07-706-691G-63
US-07-706-691G-65
US-07-706-691G-65
US-07-706-691G-67
US-07-706-691G-71
US-07-706-691G-71
US-07-706-691G-71
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NAME: Launer, Charlene
REGISTRATION NUMBER: 33,035
REFERENCE/COCKET NUMBER: 2811
TELEPOMNICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 409 base pairs
TYPE: NUCLEIC ACID
STRNDEDNESS: Single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  E: Immunex Corporation
51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-031-399-4; Sequence 4, Application US/08031399; Patent No. 5552303
   ZIP: 98101
COMPUTER READABLE FORM:
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STREET: 51 Universi
CITY: Seattle
STATE: Washington
COUNTRY: USA
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LOCATION: 1..4
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181 GAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACGGAAAGTGATGTTCAC 240
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 489;
                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATIG SYSTEM: System 7, Word 5.1a
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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                                                                                                                               APPLICATION NUMBER: US/08/535,733
FILING DATE:
CLASSIFICATION: 424
                                                                                                                                                                                        NAME: Malaska, Stephen L.
REGISTRATION NUMBER: 32,655
REFRERENCE/DOCKET NUMBER: 2833
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 1:
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LENGTH: 489 base pairs
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                                                                                                                                                                                                                                                                                                                        TYPE: nucleic acid
STRANDEDNESS: single
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LOCATION: 1..489
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Best Local Similarity
Matches 489; Conserv
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Best Local Similarity 100.0%; Pred. No. 7.1e-220;
Matches 489; Conservative 0; Mismatches 0;
NAME: McMasters, David D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 480052.409C2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-622-4900
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Quin, LeBris
APPLICANT: Grabstein, Kenneth
APPLICANT: Troutt, Anthony B.
TITLE OF INVENTION: Muscle-Trophic Factor
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: Immunex Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               El Immunex Corporation
51 University Street
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Patent No. 5660824
GENERAL INFORMATION:
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Washington
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US-08-393-305-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Anderson, Dirk
APPLICANT: Elsenman, June
APPLICANT: Fund, Victors
APPLICANT: Rauch, Charles
TITLE OF INVENTION: Epithelium-derived T-cell Factor
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSEE: Immunex Corporation
STREET: 51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
COMPUTER: Floppy disk
COMPUTER: IBM FC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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Best Local Similarity 100.0%; Pred. No. 7.1e-220;
Matches 489; Conservative 0; Mismatches 0;
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FILING DATE: 19-JUL-1995
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/031,399
FILING DATE: 08-MAR-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 4, Application US/08504042
Patent No. 5747024
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Launer, Charlene
REGISTRATION NUMBER: 33,035
REPRENCE/DOCKET NUMBER: 2811
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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STREET: 51 Universi
CITY: Seattle
STATE: Washington
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US-08-504-042-4
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Sequence 1, Application US/08726817
| Patent No. 5707616
| GENERAL INFORMATION:
| APPLICANT: Grabstein, Kenneth
| APPLICANT: Bisenman, June
| APPLICANT: Rauch, Charles
| TITLE OF INVENTION: BPITHELIUM-DERIVED T-CELL FACTOR
| NUMBER OF SEQUENCES: 15
| CORRESPONDENCE ADDRESS:
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CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/726,817

FILING DATE: 04-0CT-1996

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/08/393,305

FILING DATE: 22-FEB-1995

ATTORNEY/AGENT INFORMATION:

NAME: MCMASTERS, DAVIG D.

REGISTRATION NUMBER: 33,963

REFERENCE/DOCKET NUMBER: 480052.409C2

TELECOMMUNICATION INFORMATION:

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Pred. No. 7.1e-220;
Mismatches 0;
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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100.0%; Pr
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Best Local Similarity 100.
Matches 489; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                            STATE: Washington
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; LOCATION: 1
US-08-726-817-1
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STREET: 63(
CITY: Seatt
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               CCCAGITGCAAAGIAACAGCAATGAAGIGCTITCTCTTGGAGTTACAAGTTATTTCACIT 300
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                                                                                                                                 61 CTAAACAGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGT
                                                         121 GCAGGGCTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATT
                                                                                                                   GAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACGGAAAGTGATGTTCAC
                                                                                                                                                                                          COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Word for Windows 95, 7.0
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/392,317B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 2, Application US/08392317B
Patent No. 5795966
GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Paxton, Raymond
APPLICANT: Pettit, Dean
TITLE OF INVENTION: Antagonists of IL-15
CORRESPONDENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Immunex Corporation
STREET: 51 University Street
CITY: Seattle
STATE: Mashington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: malaska, Stephen L.
REGISTRATION NUMBER: 32,655
REFERENCE/DOCKET NUMBER: 2831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION:
INFORMATION: 206-587-0430
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
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MEDIUM TYPE: Floppy disk
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FEATURE:
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61 CTAAACAGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGT 120
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                                                                       Length 489;
                                                                                                Indels
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                                                                    Score 489; DB 1; I
Pred. No. 7.1e-220;
; Mismatches 0;
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FILING DATE: 04-0CT-1996
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COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Eisenman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: EPITHELIUM-I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1, Application US/08725969
Patent No. 5892001
GENERAL INFORMATION:
                                                                 100.0%; Sometity 100.0%; Processive 0;
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6300 Columbia Cen
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ADDRESSEE: Seed and
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COMPUTER READABLE FORM:
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             1..489
                                                                   Query Match
Best Local Similarity
Matches 489; Conserv
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CITY: Seattle
STATE: Washingt
COUNTRY: USA
; NAME/KEY:
; LOCATION:
US-08-392-317B-2
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61 CTAAACAGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGT 120
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  TITLE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR
                                                                                                                                                                                                                                                                  MELLUM TIFE: LINE PC COMPUTED:
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRINT APPLICATION DATA:
APPLICATION NUMBER: US/08/794,524
FILING DATE: 03-FEB-1997
CLASSIFICATION AA35
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATORNEY/AGENT INFORMATION:
NAME: MOCASIELS, DAVIG D.
REGISTRATION NUMBER: 33,963
REGISTRATION NUMBER: 33,963
RECCOMMUTCATION INFORMATION:
TELECOMMUTCATION INFORMATION:
TELECOMMUTCATION INFORMATION:
TELECOMMUTCATION INFORMATION:
TELECOMMUTCATION INFORMATION:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
                                                                            5: Seed and Berry
6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                 COUNTRA
ZIP: 98104
COMPUTER READABLE FORM:
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Best Local Similarity 100.C
Matches 489; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                             NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                         CITY: Seattle
STATE: Washington
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1..489
                                                                            ADDRESSEE:
STREET: 63
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; LOCATION:
US-08-794-524-1
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100.0%; Pred. No. 7.1e-220;
iive 0; Mismatches 0;
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CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATTORNEY/AGENT INFORMATION:
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Patent No. 5985262
GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Elsenman, June
APPLICANT: Elsenman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 100.
Matches 489; Conservative
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; LOCATION: 1..4
US-08-725-969-1
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                                                                                                                                                           360
                                                                                                                                                                                               301 GAGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCCTAGCAAACAAC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Word for Windows 95, 7.0
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/134,134A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Paxton, Raymond
APPLICANT: Pettit, Dean
TITLE OF INVENTION: Antagonists of IL-15
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 2, Application US/09134134A Patent No. 6165466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSE: Immunex Corporation
STREET: 51 University Street
CITY: Seattle
STATE: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
CLASSIFICATION
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/392,317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY AGENT INFORMATION:
NAME: Malaska, Stephen L.
REGISTRATION NUMBER: 32,652
REFERENCE/DOCKET NUMBER: 2831
TELECOMUNICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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100.0%;
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Best Local Similarity
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LOCATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181 GAAGAICTTATICAATCTATGCATATTGATGCTACTTTATATACGGAAAGTGATGTTCAC 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 CTAAACAGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGT 120
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421 GAAAAAATATTAAAGAATTTTTGCAGAGTTTTGTACATATTGTCCAAATGTTCATCAAC 480
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Best Local Similarity 100.0%; Pred. No. 7.1e-220;
Matches 489; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION PATA:
APPLICATION NUMBER: US/09/134,132
FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Word for Windows 95, 7.0
                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Paxton, Raymond
APPLICANT: Pettit, Dean
TITLE OF INVENTION: Antagonists of IL-15
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Immunex Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/392,317
                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: Immunex Corporation
STREET: 51 University Street
                                                                                                                                                                                Sequence 2, Application US/09134132 Patent No. 6013480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Malaska, Stephen L.
REGISTRATION UNDABER: 32,655
REFERENCE/DOCKET NUMBER: 2831
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEO ID NO: 2:
SEQUENCE CHARACIERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 98101
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                CITY: Seattle
STATE: Washington
COUNTRY: USA
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LOCATION: 1..4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
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                                                                                                                                                                                                                    100.0%; Score 489; DB 4; I
100.0%; Pred. No. 7.1e-220;
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APPLICANT: Grabstein, Raymond
APPLICANT: Patton, Raymond
APPLICANT: Pettit, Dean
TITLE OF INVENTION: Antagonists of
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Immunex Corporation
STREET: 51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; Sequence 2, Application US/09196427; Patent No. 6177079; GENERAL INFORMATION:
              INFORMATION FOR SEQ ID NO: 2 SEQUENCE CHARACTERISTICS: LENGTH: 489 base pairs TYPE: nucleic acid STRANDEDNESS: single TOPOLOGY: linear
   206-587-0430
                                                                                                                                                                                                                                    Best Local Similarity 100.
Matches 489; Conservative
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                                                                                                           MOLECULE TYPE: CDNA FEATURE:
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STATE: Washington
COUNTRY: USA
                                                                                                                                           CDS
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   TELEPHONE:
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; LOCATION:
US-09-134-456-2
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US-09-196-427-2
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   Gaps
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MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC Compatible
OPERATING SYSTEM: Word for Windows 95, 7.0
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/134,456
   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            us-ug-134-456-2; Sequence 2, Application US/09134456; Patent No. 6168783; GENERAL INFORMATION; APPLICANT: Grabstein, Kenneth; APPLICANT: Patton, Raymond; APPLICANT: Patton, Raymond; TITLE OF INVENTION: Antagonists of ILNUMBER OF SEQUENCES: 10 CORRESPONDENCE ADDRESS: ADDRESSEE: Immunex Corporation STREET: 51 University Street CITY: Seattle STATE: Washington COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA: APPLICATION NUMBER: 08/392,317
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REGISTATION NUMBER: 32,655
REFERENCE/DOCKET NUMBER: 2831
TELECOMMUNICATION INFORMATION:
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Matches 489; Conservative
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Word for Windows 95, 7.0
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/196,427
                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 489; DB 4; L
100.0%; Pred. No. 7.1e-220;
Live 0; Mismatches 0;
                                                                                                                                                NAME: Malaska, Stephen L.
REGISTRATION NUMBER: 32,655
REFERENCE/DOCKET NUMBER: 2831
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/392,317
FILING DATE:
                                                                                                                                         ATTORNEY/AGENT INFORMATION:
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Best Local Similarity 100.
Matches 489; Conservative
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                                                                           FILING DATE:
CLASSIFICATION:
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US-09-196-427-2
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          Patent No. 6184359
GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Fisenman, June
APPLICANT: Fung, Victor
APPLICANT: Rung, Charles
TITLE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/189,193
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION BATA:
APPLICATION NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATTORNEY/AGENT INFORMATION:
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Best Local Similarity 100.0%; Pred. No. 7.1e-220;
Matches 489; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                   ADDRESSEE: Seed and Berry
STREET: 6300 Columbia Center, 701 Fifth Avenue
CITY: Seattle
STATE: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: MCMASTEIS, DAVID D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 480052.409C2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-622-4900
INFORMATION FOR SEQ ID NO: 1:
Sequence 1, Application US/09189193
Patent No. 6184359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 489 base pairs
TYPE: nucleic acid
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Best Local Similarity
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US-09-189-193-1
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RESULT 13 US-09-189-193-1 300

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361 AGTTTGTCTTCTAATGGGAATGTAACAGAATCTGGATGCAAAGAATGTGAGGAACTGGAG 420
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                                                                                      181 GAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACGGAAAGTGATGTTCAC
                                                                                                                                          241 CCCAGTTGCAAAGTAACAGCAATGAAGTGCTTTCTCTTGGAGTTACAAGTTATTCACTT
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MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: System 7, Word 6.0
SOFWMARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Immunex Corporation
TITLE OF INVENTION: Muscle Trophic Factor
NUMBER OF SEQUENCES: 2
CORRESONDENCE ADDRESS:
ADDRESSEE: Immunex Corporation
STREET: 51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: PCT/US96/06423
FILING DATE: 07 May 1996
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NAME: Malaska, Stephen L.
REGISTATION UNBER: 32,655
REPERENCE/DOCKET UNMBER: 2833-
TELECOMMUNICATION INFORMATION:
TELEPHOR: 206-587-0430
INFORMATION FOR SED ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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STATE: Washington
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Best Local Similarity
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PCT-US96-06423-1
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   301 GAGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCCTAGCAAACAAC 360
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentul Release #1.0, Version #1.25
CURREWY APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/03793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 100.0%; Score 489; DB 5; I Best Local Similarity 100.0%; Pred. No. 7.1e-220; Matches 489; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                     APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Elsenman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: Interleukin-15
NUMBER OF SEQUENCES: 12
                                                                                                                                                                                                                                                                  SSULT 14
TT-US94 03793-4
SEQUENCE 4, Application PC/TUS9403793
GENERAL INFORMATION:
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STREET: 51 University Street
CITY: Seattle
STATE: Washington
COUNTRY: USA
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NAME: Launer, Charlene
REGISTRATION NUMBER: 33,035
REFERENCE/DOCKET NUMBER: 2811
TELECOMNUNCATION INFORMATION:
TELEPHONE: 206.587-0430
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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                                                                                                                                                                               481 ACTICTIGA 489
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LOCATION: 1..4
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             Indels
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APPLICANT: Vecrapaneni, Dange
APPLICANT: Hamanaka, Shoji
APPLICANT: Namanaka, Iwao
IITLE OF INVENTION: RIBOZYMES TARGETED TO IL-15 MRNA
NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
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MEDIUM TYPE: Diskette
COMPUTER: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows 95
SOFTWARE: FastSEQ for Windows Version 2.0b
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/962,503
FILING DATE: 31-OCT-1997
ATTONREV/AGENT INFORMATION:
ATTORNEV/AGENT INFORMATION:
ATTORNEV/AGENT INFORMATION:
ATTORNEV/AGENT INFORMATION:
ATTORNEV/AGENT INFORMATION:
ATTORNEV/AGENT INFORMATION:
ATTORNEV/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
ATTORNEV/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
ATTORNEY
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STREET: 4225 Executive Square, Suite 1400
CITY: La Jolla
        Mismatches
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REGISTRATION NUBBER: 38.347
REFERENCE/DOCKET NUMBER: 09326/002001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 619/678-5070
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Patent No. 6087172
GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
Matches 489; Conservative
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STATE: CA
COUNTRY: USA
COUNTRY: USA
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                                                                                                                                               Length 1202;
                                                                                                                                                                           Indels
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Patent No. 6001973
GENERAL INFORMATION:
APPLICANT: Maslinski, Wlodzimierz
TITLE OF INVENTION: ANTAGONISTS OF INTERLEUKIN-15
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
                                                                                                                                          Score 489; DB 3; I
Pred. No. 6.8e-220;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/08/842,947 FILING DATE: 25-APR-1997
                                                                                                                                        100.0%; Sc
100.0%; Pr
live 0;
JAYPE: nucleic acid STRANDEDNESS: double TOPOLOGY: linear STRANDEDNESS: double HOLECULE TYPE: DNA US-08-962-503-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
                      pairs
                                                                                                                                       Ouery Match
Best Local Similarity 100.
Matches 489; Conservative
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ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
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COUNTRY:
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Sequence 7, Application US/08842947
Patent No. 6001973
GENERAL INFORMATION:
APPLICANT: Strom, Terry B.
APPLICANT: Maslinski, Wlodzimierz
TITLE OF INVENTION: ANTAGONISTS OF INTERLEUKIN-15
                                                                                                                                                                                                                                                                                                                                                  89.6%; Score 438; DB 3;
99.8%; Pred. No. 5e-196;
tive 0; Mismatches 1
                                                                                                       01948/039001
CLASSIFICATION: 432
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/016,634
FILING DATE: 26-APR-1996
ATTORNEY/AGENT INFORMATION:
                                                                        NAME: Freeman, John W.
REGISTRATION NUMBER: 29,066
REFERENCE/FOOCKET UNBER: 019
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
                                                                                                                                                                                                                                                            NAME/KEY: Coding Sequence;
LOCATION: 1...486
OTHER INFORMATION:
US-08-842-947-5
                                                                                                                                              TELEFAX: 617-542-8906
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 99.8
Matches 488; Conservative
                                                                                                                                                                                                         TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    80.4%; Score 393; DB 3; 1
99.8%; Pred. No. 5.5e-175;
tive 0; Mismatches 1;
                                                                                                                                                                                  OPERATING SYSTEM: Windows95
SOFTWARE: FastENG for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/842,947
FILING DATE: 25-APR.1997
CLASSIFICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: 00/016,634
FILING DATE: 26-APR.1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                     01948/039001
                                      O.
                                       Richardson,
                                                                                                                                                                                                                                                                                                                                                    NAME: Freeman, John W.
REGISTRATION NUMBER: 29,066
REPERENCE/DOCKET NUMBER: 0194
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEPAX: 617-542-8906
NUMBER OF SEQUENCES.
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson,
STREET: 225 Franklin Street
CITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ), NAME/KEY: Coding Sequence
; LCGATION: 1...486
; OTHER INFORMATION:
US-08-842-947-7
                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 99.8
Matches 443; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 617-542-8906
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                      COUNTRY: US
ZIP: 02110-2804
                                                                                      STATE: MA
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205 ATTGATGCTACTTTATATACGGAAAGTGATGTTCACCCCAGTTGCAAAGTAACAGCAATG 264
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 345;
    445 CAGAGTTTTGTACATATTGTCCAAATGTTCATCAACACTTCTTGA 489
                           301 CAGAGITITGTACAIAITGICCAAAIGIICAICAICAACACITCIIGA 345
                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, Version #1.25 CUBRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/726,817
FILING DATE: 04-OCT-1996
CLASSIFICATION: 435
PRIOR APPLICATION NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATTONEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                ADDRESSBE: Seed and Berry
STREET: 6300 Columbia Center, 701 Fifth Avenue
CITY: Seattle
STATE: Washington
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     70.6%; Score 345; DB 1; Le 100.0%; Pred. No. 1.6e-152; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: McMasters, David D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 480052.409C2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-622-4900
INFORMATION FOR SEQ ID NO: 12:
                                                                                                                                                    Sequence 12, Application US/08726817
Patent No. 5707616
                                                                                                                                                                                                                       APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Eisenman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 345 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
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Best Local Similarity 100.0
Matches 345; Conservative
                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98104
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US-08-726-817-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY:
                                                                                                                                    US-08-726-817-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               325
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                                                                                                      Sequence 12, Application US/08393305
Patent No. 5574138
GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Eisenman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INFUNTION: EPITHELIUM-DERIVED T-CELL FACTOR
NUMBER OF SEQUENCES: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
PAPLICATION NUMBER: US/08/393,305
FILING DATE: 22-FEB-1995
CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                       E: Seed and Berry
6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: MCMASTERS, David D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 480052.409C2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-622-4900
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
421 GAAAAAAATATTAAAGAATTTTTG 444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 345 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best_Local Similarity 100.
Matches 345; Conservative
                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed and
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 98104
COMPUTER READABLE FORM:
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CITY: Seattle
STATE: Washington
COUNTRY: USA
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Washington
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CITY: Seattle
STATE: Washingt
COUNTRY: USA
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LOCATION:
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                                                       181 GATACAGTAGAAAATCTGATCATCCTAGCAAACAACAGTTTGTCTTCTAATGGGAATGTA 240
                                    205 ATTGATGCTACTTTATATACGGAAAGTGATGTTCACCCCAGTTGCAAAGTAACAGCAATG 264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     145 AACTGGGTGAATGTAATAAGTGATTTGAAAAATTGAAGATCTTATTCAATCTATGCAT 204
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                           445 CAGAGTTTTGTACATATTGTCCAAATGTTCATCAACACTTCTTGA 489
                                                                                                                            Sequence 12, Application US/08725969
Patent No. 5892001
GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Eisenman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: EPTTHELIUM-DERIVED T-CELL FACTOR
NUMBER OF SEQUENCES: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FUKM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FOCOMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/725,969
FILING DATE: 04-OCT-1996
CLASSIFICATION: 435
PRIOR APPLICATION NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATTORNEY/AGENT INPORMATION:
NAME: MCMASIERS; DAVIG D:
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 32,063
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed and Berry
STREET: 6300 Columbia Center, 701 Fifth Avenue
CITY: Seatile
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Pred. No. 1.6e-152; ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 345 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 345; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98104
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; LOCATION:
US-08-725-969-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY:
                                                                                                                                                                                                                      US-08-725-969-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE:
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325 GATACAGTAGAAAATCTGATCATCCTAGCAAACAAGAGTTGGTCTTCTAATGGGAATGTA 384
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                                                                                                                                                                                                                                                            445 CAGAGTTTTGTACATATTGTCCAAATGTTCATCAACACTTCTTGA 489
                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Grabstein, Kenneth
APPLICANT: Grabstein, Dirk
APPLICANT: Anderson, Dirk
APPLICANT: Elsenman, June
APPLICANT: Fung, Victor
APPLICANT: Fung, Victor
APPLICANT: Buch, Charles
TITLE OF INVENTION: BPITHELIUM-DERIVED T-CELL FACTOR
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3: Seed and Berry
6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              70.6%; Score 345; DB 2; L4 100.0%; Pred. No. 1.6e-152; ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE: 22-FEB-1995
FILING DATE: 22-FEB-1995
ATTORNEY/AGENT INFORMATION:
NAME: MCMASters, David D.
REGISTATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 480052.409C
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION SCO-622-4900
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/794,524 FILING DATE: 03-FEB-1997 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                         Sequence 12, Application US/08794524 Patent No. 5985262 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 345 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 100.C
Matches 345; Conservative
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COMPUTER READABLE FORM:
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ATTGATGCTACTTTATATACGGAAAGTGATGTTCACCCCAGTTGCAAAGTAACAGCAATG 264
                                                                                                                                        324
                                                                                                                                                GATACAGTAGAAAATCTGATCATCCTAGCAAACAACAGTTTGTCTTCTAATGGGAATGTA 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGATCTTATTCAATCTATGCAT 204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 110 GCTGTTTCAGTGCAGGGCTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATT 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TAGCAAACAACAGTTTGTCTTCTAATGGAATGTAACAGAATCTGGATGCAAAGAATGTG 409
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Interleukin-15 EXPRESSION
                                    AAGTGCTTTCTCTTGGAGTTACAAGTTATTTCACTTGAGTCCGGAGATGCAAGTATTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              170 IGAAAAAATTGAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTATTTCACTTGAGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      787 tagcaaacaacaacagtttgtcttctaatgggaatgtaacagaatctggatgcaaagaatgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
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                                                                                                                                                                                                                                                                                                       CAGAGITITIGIACATATIGICCAAAIGITCATCAACACTTCTIGA 489
                                                                                                                                                                                                                                                                                                                      67.3%; Score 329; DB 2; I
99.7%; Pred. No. 4.5e-145;
Live 0; Mismatches 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: C. Frank Bennett
APPLICANT: C. Frank Bennett
TITLE OF INVENTION: ANTISENSE MODULATION (
TITLE REFERENCE: RTS-0022
CURRENT APPLICATION NUMBER: US/09/200,141
CURRENT FILING DATE: 1998-11-25
NUMBER OF SEQ ID NOS: 47
                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1, Application US/09200141
Patent No. 5985663
GENERAL INFORMATION:
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Best Local Similarity 99.77
Matches 379; Conservative
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US-09-200-141-1
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                                                                                                              GATACAGTAGAAAATCTGATCATCCTAGCAAACAACAGTTTGTCTTCTAATGGGAATGTA
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                                                                                                                                                                                                                                                                                                                       Sequence 12, Application US/09189193
Patent No. 6184359
GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Fung, Victor
APPLICANT: Fung, Victor
APPLICANT: Fung, Victor
TILE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR
UNDBER OF SEQUENCES:
CORRESPONDENCE: Seed and Berry
                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIALS
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/189,193
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5: Seed and Berry
6300 Columbia Center, 701 Fifth Avenue
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PRIOR APPLICATION:
PRIOR APPLICATION NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATTORNEY/AGENT INFORMATION:
NAME: MCMASters, David D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 480052,409C2
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-622-4900
INFORMATION FOR EEQ ID NO: 12:
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TYPE: nucleic acid
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Best Local Similarity 100.
Matches 345; Conservative
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Washington
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US-09-189-193-12
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ZIP: 98104
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US-08-393-305-4
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US-08-726-817-4
                                  US-08-393-305-4
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Gaps
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Patent No. 5552303
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Elsenman, June
APPLICANT: Fung, Victor
APPLICANT: Elsenman, June
APPLICANT: Elsenman, June
APPLICANT: Elsenman, Dine
APPLICANT: Enauch, Charles
TITLE OF INVENTION: Epithelium-derived T-cell Factor
WUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Immunex Corporation
STREET: 51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFWARRE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
FAPLICATION NUMBER: US/08/031,399
FILING DATE: 19930308
CLASSIFICATION: 530
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Pred. No. 3.1e-41;
0; Mismatches 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY AGENT INFORMATION:
NAME: Launer, Charlene
REGISTATION UNDRER: 33,035
REFERENCE/DOCKET UNBER: 2811
TELECOMMUNICATION INFORMATION:
TELEMONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 489 BASE PALS
TYPE: NUCLEIC ACID
STRANDEDNESS: SINGLE
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                                                     470 TGTTCATCAACACTTCTTGA 489
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ilarity 99.4%;
Conservative
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STATE: Washington
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Best Local Similarity
Matches 157; Conserv
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US-08-031-399-1
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                                                                                                      APPLICANT: Elsenman, June
APPLICANT: Elsenman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENCE: EPITHELIUM-DERIVED T-CELL FACTOR
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURENTING SITEM:
CURENT APPLICATION DATA:
CURENT APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE: 22-FEB-1995
CLASSIFTCATION:
ATONEX/AGENT INFORMATION:
NAME: MOMESTER: 33,963
REGISTRATION NUMBER: 33,963
REGISTRATION NUMBER: 33,963
RECISTRATION NUMBER: 33,963
RECISTRATION NUMBER: 480052,409C2
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION OF 4:
SEQUENCE CHRRACTERISTICS:
LENGTH: 489 base pairs
                                                                                                                                                                                                                                                5: Seed and Berry
6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 107; DB 1; L
Pred. No. 3.1e-41;
0; Mismatches 1;
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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Patent No. 5707616
GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Elsenman, June
Sequence 4, Application US/08393305 Patent No. 5574138
                                                            APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Eisenman, June
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99.4%;
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STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                STREET: 6300 Columk
CITY: Seattle
STATE: Washington
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1..489
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Best Local Similarity
Matches 157; Conserv
                                            GENERAL INFORMATION:
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67 AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
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99.4%; Pred. No. 3.1e-41;
tive 0; Mismatches 1; Indels
                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/504,042
FILING DATE: 19-JUL-1995
CLASSIFICATION UNBER: US 08/031,399
FILING DATE: 08-MR-1993
ATTORNEY/AGENT INFORMATION:
NAME: Launer: Charlene
REGISTRATION NUMBER: 33,035
REFERENCE/DOCKET NUMBER: 33,035
REFERENCE/DOCKET NUMBER: 2811
TELECHONE: 206-587-0430
INFORMATION FOR SED ID NO: 1:
SEQUENCE CHARACTERISTICS:
FWATTOR APPLICATION:
SEQUENCE CHARACTERISTICS:
FWATTOR APPLICATION:
SEQUENCE CHARACTERISTICS:
FWATTOR APPLICATION:
FELEPHONE: 206-587-0430
INFORMATION FOR SED ID NO: 1:
SEQUENCE CHARACTERISTICS:
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Patent No. 579596
GENERAL INFORMATION:
APPLICANT: Grabstein, Renneth
APPLICANT: Pettit, Dean
TITLE OF INVENTION: Antagonists of IL-15
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Immunex Corporation
STREET: 51 University Street
CITY: Seattle
STATE: Washington
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 489 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 157; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           single
            Washington
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MOLECULE TYPE: CDNA
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ZIP: 98101
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US-08-504-042-1
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FEATURE:
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Pred. No. 3.1e-41;
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Patent No. 5747024
GENERAL INFORMATION:
APPLICANT: Grabatein, Kenneth
APPLICANT: Bisenman, June
APPLICANT: Rauch, Charles
ITLE OF INVENTION: Epithelium-derived T-cell Factor
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
            TITLE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESSE: ADDRESSES: Seed and Berry
STREET: 6300 Columbia Center, 701 Fifth Avenue CITY: Seatile
STATE: Washington
COUNTRY: USA
                                                                                                                                                                                        COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

MEDIUM TYPE: FLOPPY disk

COMPUTER: IBM PC Compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

APPLICATION NUMBER: US 08/393,305

FILING DATE: 20-FEB-1995

ATTORNEY/AGENT INFORMATION:

NAME: MCMASTERS; David D.

REFERENCE/DOCKET NUMBER: 33,963

REFERENCE/DOCKET NUMBER: 33,963

REFERENCE/OCKET NUMBER: 33,663

REFERENCE/OCKET NUMBER: 306-52,4900

INFORMATION INFORMATION:

TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION:

TOWNER: MC 10 NO: 4:

SEQUENCE CHARACTERISTICS:

LENGTH: 489 base pairs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 21.9%; Score 107; DB Best Local Similarity 99.4%; Pred. No. 3.1e Matches 157; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: Immunex Corporation
STREET: 51 University Street
CITY: Seattle
Rauch, Charles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; LOCATION: 1..489
US-08-726-817-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: CDS
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0; Gaps

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67 AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
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Patent No. 5985262

GENERAL INFORMATION:

APPLICANT: Grabatein, Kenneth

APPLICANT: Bisemmen, June

APPLICANT: Rauch, Charles

TILLE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR

NUMBER OF SEQUENCES: 15

CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1; Indels
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STREET: 6300 Columbia Center, 701 Fifth Avenue
CITY: Seattle
STATE: Washington
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-TOS/MS-TOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 107; DB 2;
Pred. No. 3.1e-41;
0; Mismatches 1;
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APPLICATION NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATTORNEY/AGENT INFORMATION:
NAME: MCMASTERS, David D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 480052.409C2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-622-4900
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: MCMSters, David D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 480052.409C2
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATTORNEY/AGENT INFORMATION:
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FILING DATE: 03-FEB-1997
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21.9%;
99.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 21.9
Best Local Similarity 99.4
Matches 157; Conservative
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US-08-725-969-4
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US-08-794-524-4
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US-08-725-969-4
Sequence 4, Application US/08725969
Sequence 5. Sequence 6. Sequence 6. Sequence 6. Sequence 7. Sequence 7. Sequence 7. Sequence 7. Sequence 8. Sequ
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MEDIUM TYPE: Floppy d1sk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/725,969
FILING DATE: 04-OCT-1996
CLASSIFICATION: 435
         OPERATING SYSTEM: Word for Windows 95, 7.0
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/392,317B
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                                                                                                                                                      CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: MAIASA, Stephen L.
REGISTRATION NUMBER: 2831
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TENER H. 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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Best Local Similarity 99.4:
Matches 157; Conservative
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CLASSIFICATION: 435
PRIOR APPLICATION DATA:
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CITY: Seattle
STATE: Washington
COUNTRY: USA
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MOLECULE TYPE: CDN
HYPOTHETICAL: NO
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ANTI-SENSE: NO
FEATURE:
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; LOCATION:
US-08-392-317B-1
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67 AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
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                                                                                                                                                                                                                                                                                                    0; Gaps
                                                                                                                                    Length 489;
                                                                                                                                Score 107; DB 3; Length 48
Pred. No. 3.1e-41;
0; Mismatches 1; Indels
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Word for Windows 95, 7.0
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/134,134A
                                                                                                                                                                                                                                                                                                                                                        187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
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APPLICANT: Grabstein, Kenneth
APPLICANT: Parton, Raymond
APPLICANT: Pettit, Dean
TITLE OF INVENTION: Antagonists of IL-15
CORRESPONDENCE, ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: Immunex Corporation
STREET: 51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1, Application US/09134134A Patent No. 6165466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
PARIOR APPLICATION DATA:
APPLICATION NUMBER: 08/392,317
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
NAME: MALASKA, Stephen L.
REGISTRATION NUMBER: 32,655
REFERENCE/DOCKET NUMBER: 2831
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
TYPE: nucleic acid
                                                                                                                                  21.9%;
99.4%;
                                                                                                                                Query Match 21.9
Best Local Similarity 99.4
Matches 157; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: nucleic acid
STRANDEDNESS: single
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CITY: Scattle
STATE: Washington
COUNTRY: USA
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ANTI-SENSE: NC
FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 98101
                                        ; NAME/KEY:
; LOCATION:
US-09-134-132-1
   ANTI-SENSE:
FEATURE:
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US-09-134-134A-1
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                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                     21.9%; Score 107; DB 2; Length 489; 99.4%; Pred. No. 3.1e-41; Live 0; Mismatches 1; Indels
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Word for Windows 95, 7.0
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/134,132
FILING DATE:
PROOR APPLICATION DATA:
PROOR APPLICATION DATA:
FILING DATE:
FILING DATE:
FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1, Application US/09134132
Patent No. 6013480
GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Paxton, Raymond
APPLICANT: Pettit, Dean
TITLE OF INVENTION: Antagonists of IL-15
CORRESPONDENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: MAJASKA, Stephen L.
REGISTRATION NUMBER: 32,655
REFERENCE/DOCKET NUMBER: 2831
TELECOMMUTICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           E: Immunex Corporation
51 University Street
           INFORMATION FOR SEQ ID NO: 4 SEQUENCE CIRRACTERISTICS: LENGTH: 489 base pairs TYPE: nucleic acid STRANDEDNESS: single TOPOLOGY: linear FEATURE.
206-622-4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                         Matches 157; Conservative
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STREET: 51 C.
CITY: Seattle
CITY: Washington
                                                                                                                                              CDS
1..489
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HYPOTHETICAL:
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TELEPHONE:
                                                                                                                                          ; NAME/KEY;
; LOCATION:
US-08-794-524-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-134-132-1
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67 AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/196,427
                                                                                                                                 187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
                                                                                                                                                    187 CTTATTCAATCTATGCATATTGATGCTACTTATATAC 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 96101
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Word for Windows 95, 7.0
                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Parton, Raymond
APPLICANT: Pettit, Dean
TITLE OF INVENTION: Antagonists of IL-15
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Immunex Corporation
STREET: 51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/392,317
FILING DATE:
                                                                                                                                                                                                                              RESULT 35
US-09-196-427-1
; Sequence 1, Application US/09196427
; Patent No. 6177079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Malaska, Stephen L.
REGISTRATION NUMBER: 32,655
REFRENCE/DOCKET NUMBER: 2831
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
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TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: Seattle
STATE: Washington
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; LOCATION:
US-09-196-427-1
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                                                                                                                                                                                         Gaps
                                                                                             67 AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
                                                          Gaps
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             Score 107; DB 4; Length 489;
Pred. No. 3.1e-41;
0; Mismatches 1; Indels
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Pred. No. 3.1e-41;
); Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Word for Windows 95, 7.0
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                            Antagonists of IL-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/09/134,456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Immunex Corporation
STREET: 51 University Street
CITY: Seattle
STATE: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/392,317
                                                                                                                                                                                                                                                                                                                                                        US-09-134-456-1
Sequence 1, Application US/09134456
Patent No. 6168783
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Grabstein, Kenneth
APPLICANT: Paxton, Raymond
APPLICANT: Pettit, Dean
TITLE OF INVENTION: Antagonists
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
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REGISTRATION NUMBER: 32,655
REFERENCE/DOCKET NUMBER: 28:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 1:
                   21.9%;
99.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
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Best Local Similarity 99.4
Matches 157; Conservative
                                     Best Local Similarity 99.4
Matches 157; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: nucleic acra
STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 98101
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FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; LOCATION:
US-09-134-456-1
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                   Query Match
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67 AGTCATTITCIAACTGAAGCTGGCATICATGICTICATTITGGGCTGITICAGIGCAGGG 126
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/03793
FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21.9%; Score 107; DB 5;
99.4%; Pred. No. 3.1e-41;
live 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
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APPLICANT: Grabstein, Dirk
APPLICANT: Bisenman, June
APPLICANT: Fisenman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: Interleukin-15
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSEE: Immunex Corporation
                                                                                                                                                                                                                                                                                                                                                                  STREET: 51 University Street
CITY: Seattle
STATE: Washington
COUNTRY: USA
21P: 98101
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
COMPUTER
   Sequence 1, Application PC/TUS9403793 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                              E: Immunex Corporation
51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 13, Application US/08393305
Patent No. 5574138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: Launer. Charlene
REGISTRATION NUMBER: 33,035
REFERENCE/DOCKET NUMBER: 2811
TELEDHONE: 206-587-0430
INFORMATION FOR SEO ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 489 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Aleseman, June
APPLICANT: Fung, Victor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 21.9
Best Local Similarity 99.4
Matches 157; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: CDNA HYPOTHETICAL: NO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; LOCATION:
PCT-US94-03793-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-393-305-13
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                                                                                                                                                                                                                                                                                                               APPLICANT: Grabatein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Bisenman, June
APPLICANT: Eisenman, June
APPLICANT: Eusenman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed and Berry
STREET: 6300 Columbia Center, 701 Fifth Avenue
CITY: Seattle
STATE: Washington
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/189,193
CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
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APPLICATION DATA:

APPLICATION NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATTORNEY/AGENT INFORMATION:

NAME: MCMASTERS, David D.

REGISTRATION NUMBER: 34963
REFERENCE/DOCKET NUMBER: 480052.409C2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-622.4900
INFORMATION FOR SEC ID NO: 4:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                           Sequence 4, Application US/09189193
Patent No. 6184359
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           . 489 base pairs
nucleic acid
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Matches 157; Conservative
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TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 98104
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US-09-189-193-4
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                                                                                                                                                                                             US-09-189-193-4
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145 AACTGGGTGAATGTAATAAGTGATTTGAAAAATTGAAGATCTTATTCAATCTATGCAT 204
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Anderson, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Eloppy disk
COMPUTER: Eloppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/725,969
FILING DATE: 04-OCT 1996
CLASSIFICATION: 435
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/726,817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Seed and Berry
STREET: 6300 Columbia Center, 701 Fifth Avenue
CITY: Seattle
STATE: Washington
COUNTRY: USA
                                                                                                                    PULGASIFLATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US 08/393,305
FILLING DATE: 22-FEB-1995
ATTORNEY AGENT INFORMATION:
NAME: MCMASTERS, David D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 480052,409C2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-622-4900
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LEMGTH: 345 base pairs
TYPE: nucleic acid
STRANDEDNESS: SINGLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/393,305
FILING DATE: 22-FEB-1995
ATTOWNEY/AGENT INFORMATION:
NAME: MCMASTERS, David D.
REGISTRATION NUMBER: 33,963
                                                   UMBER: US/08/726,817
04-OCT-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 13, Application US/08725969 Patent No. 5892001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             205 ATTGATGCTACTTTATATAC 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 ATTGATGCTACTTTATATAC 80
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Best Local Similarity 100.
Matches 80; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1..345
                                                                                                     CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: CDS
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US-08-726-817-13
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US-08-725-969-13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 16.4%; Score 80; DB 1; Length 345; Best Local Similarity 100.0%; Pred. No. 1.3e-28; Matches 80; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 13, Application US/08726817
Patent No. 5707616
GENERAL INFORMATION:
APPLICANT: Grabatein, Kenneth
APPLICANT: Eisenman, June
APPLICANT: Eisenman, June
APPLICANT: Escenman, June
TITLE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR
UNDRER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed and Berry
STREET: 6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUW TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/393,305
FLING DATE: 22-FEB-1995
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: MCMASTERS, David D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 33,963
TELECHOMONICATION INFORMATION:
TELECHOMONICATION INFORMATION:
TELECHOMONICATION INFORMATION:
TELECHOMORE: 206-622-4900
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 345 base pairs
TYPE: nucleic acid
                                  TITLE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR NUMBER OF SEQUENCES: 15
                                                                            CORRESPONDENCE ADDRESS:
ADDRESSE: Seed and Berry
STREET: 6300 Columbia Center, 701 Fifth Avenue
CITY: Seattle
STATE: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         205 ATTGATGCTACTTTATATAC 224
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            Rauch, Charles
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STATE: Washington
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; LOCATION: 1.345
US-08-393-305-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: CDS
                                                                                                                                                                                                                         98104
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US-08-726-817-13
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145 AACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGATCTTATTCAATCTATGCAT 204
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                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Grabstein, Kenneth
APPLICANT: Anderson, Dirk
APPLICANT: Eisenman, June
APPLICANT: Eisenman, June
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed and Berry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 98104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
APPLICATION DATA:
PILING DATE: US/09/189,193
                                                                                        Query Match 16.4%; Score 80; DB 2; Le
Best Local Similarity 100.0%; Pred. No. 1.3e-28;
Matches 80; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         E: Seed and Berry
6300 Columbia Center, 701 Fifth Avenue
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PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE: 22-FEB-1995
ATTORNEY AGENT INFORMATION:
NAME: MCMASters, David D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 480052.409C
TELEPHONE: 206-622-4900
INFORMATION FOR SEQ ID NO: 13:
                                                                                                                                                                                                                                                                                                                                                         RESULT 42
US-09-189-193-13
'Sequence 13, Application US/09189193
'Patent No. 6184359
                                                                                                                                                                                                                                                       205 ATTGATGCTACTTTATATAC 224
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 345 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
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CITY: Seattle
STATE: Washington
                LOCATION: 1..345
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Best Local Similarity
Matches 80; Conserva
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FEATURE:
                           US-08-794-524-13
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US-09-189-193-13
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APPLICANT: Anderson, Dirk
APPLICANT: Eisenman, June
APPLICANT: Fung, Victor
APPLICANT: Fung, Victor
APPLICANT: Rauch, Charles
TITLE OF INVENTION: EPITHELIUM-DERIVED T-CELL FACTOR
CORRESPONDENCE: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTAARE: Patentin Release #1.0, Version #1.25
GURREWT APPLICATION DATA:
APPLICATION NUMBER: US/08/794,524
FILING DATE: 25
CLASSIFICATION NUMBER: US/08/794,524
FILING DATE: 25
FRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/393,305
FILING APPLICATION NUMBER: 33,963
ATTORNEY/AGENT INFORMATION:
NAMME: MCMASTERS, US 08/393,305
TELECOMMUNICATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 33,963
TELECOMMUNICATION NUMBER: 33,963
TELECOMMUNICATION NUMBER: 33,963
TELECOMMUNICATION NUMBER: 36-622-4900
INFORMATION FOR SEQ ID NO: 13:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E: Seed and Berry 6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                            Score 80; DB 2; LA
Pred. No. 1.3e-28;
0; Mismatches 0;
REFERENCE/DOCKET NUMBER: 480052.409C2
TELECOMUNICATION INFORMATION:
TELEPHONE: 206-622-4900
INFORMATION FOR SEO ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 345 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-794-524-13
Sequence 13, Application US/08794524
Patent No. 5985262
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                        Query Match 16.4%; Soc
Best Local Similarity 100.0%; P.
Matches 80; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       205 ATTGATGCTACTTTATATAC 224
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 345 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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STATE: Washington
                                                                                                                                                                                                         NAME/KEY: CDS
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US-08-725-969-13
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NAME/KEY:
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Query Match 6.5%; Score 32; DB 2; Length 32; Best Local Similarity 100.0%; Pred. No. 4.1e-06; Matches 32; Conservative 0; Mismatches 0; Indels
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Patent No. 6352829
GENERAL INFORMATION: Chenchik, Alex
APPLICANT: Chenchik, Alex
Jokhadze, George
BibliashVilli, Robert
TILLE OF INVENTION: METHOD OF ASSAVING DIFFERENTIAL
EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: Fast5ED for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                              COMPUTER: US

21P: 94025

COMPUTER: B4025

COMPUTER: Diskette

COMPUTER: DISKETTER: Windows Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/859,998

FILING DATE: 21-MAY-1997

CLASSIFICATION DATA:

APPLICATION NUMBER: 37,620

REGISTRATION NUMBER: 37,620

REGISTRATION NUMBER: 37,620

REFERENCE/DOCKET NUMBER: 37,620

TELLEPHONE: 415-32-5070

TELLEPAN: 415-32-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 2200 Sand Hill Road, Suite 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Oligonucleotide primer US-08-859-998-436
                     NUMBER OF SEQUENCES: 1375
CORRESPONDENCE ADDRESS:
CORRESPONDENCE F1sh & Richardson, P.C.
STREET: 2200 Sand Hill Road, Suite 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         347 TCCTAGCAACAACAGTTTGTCTTCTAATGGG 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                32 TCCTAGCAAACAACAGTTTGTCTTCTAATGGG 1
TITLE OF INVENTION: EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 1375
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COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: Menlo Park
STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 415-854-0875
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 32 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: US
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                                                                                                             Menlo Park
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                                                                                                             CITY: N
STATE:
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                                                                                                                                                                     Sequence 435, Application US/0885998
Patent No. 5994076
GENERAL INFORMATION:
APPLICANT: Chenchik, Alex
APPLICANT: Bibilashvilli, Robert
TITLE OF INVENTION: EXPRESSION
TITLE OF INVENTION: EXPRESSION
NUMBER OF SEQUENCES: 1375
CORRESPONDENCE ADDRESS:
ADDRESSE: Fish & Richardson, P.C.
STREET: 2200 Sand Hill Road, Suite 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Chenchik, Alex
APPLICANT: Jokhadze, George
APPLICANT: Bibilashvilli, Robert
TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6.5%; Score 32; DB 2; Le
100.0%; Pred. No. 4.1e-06;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM COmpatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     oligonucleotide primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY AGENT INFORMATION:
NAME: Field, DETE.
NAME: Field, DETE.
REGISTRATION NUMBER: 37,620
REFERENCE/DOCKET NUMBER: 09096/002001
TELEFORMUNICATION INFORMATION:
TELEFHONE: 415-322-5070
TELEFHONE: 415-322-5070
TELEFACY: 415-854-0875
INFORMATION FOR SEQ ID NO: 435:
SEQUENCE CHARACTERISTICS:
LENGTH: 32 Dase pairs
TYPE: nucleic acid
STRANDEDDRESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22 TTGAGAAGTATTTCCATCCAGTGCTACTTGTG 53
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/859,998
FILING DATE: 21-MA-1997
FILING DATE: 21-MA-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-859-998-436/c; Sequence 436, Application US/08859998; Patent No. 5994076
                       205 ATTGATGCTACTTTATATAC 224
                                                 61 ATTGATGCTACTTTATATAC 80
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Best Local Similarity 100.C
Matches 32; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COTHER INFORMATION:
US-08-859-998-435
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
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                                                                                                                                       RESULT 43
US-08-859-998-435
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                                                                                                                                                                                                                                                               Length 32;
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Pred. No. 0.58;
9; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Vecrapaneni, Dange
APPLICANT: Hamenaka, Shoji
APPLICANT: Hamenaka, Shoji
APPLICANT: No. 6087172awa, Iwao
TITLE OF INVENTON: RIBOZYMES TARGETED TO IL-15 MRNA
NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
                                                                                                                          ; SEQUENCE DESCRIPTION: Oligonucleotide primer; SEQUENCE DESCRIPTION: SEQ ID NO: 436:
                                                                                                                                                                                                                                                           DB 4; Le
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SISTEM: Windows 95
SOFTWARE: FRASTSQ for Windows Version 2.0b
SOFTWARE: TASTSQ for Windows Version 2.0b
SOFTWARE: 105/08/962,503
APPLICATION NUMBER: US/08/962,503
FILING DATE: 31-07-1997
ATTORNEY/AGENT INFORMATION:
NAME: Haile, Ph.D., Lisa A
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 09326/002001
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: Fish & Richardson P.C. STREET: 4225 Executive Square, Suite 1400
                                                                                                                                                                                                                                                      Query Match 6.5%; Score 32; DB Best Local Similarity 100.0%; Pred. No. 4.1 Matches 32; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                      347 TCCTAGCAAACAACAGTTTGTCTTAATGGG 378
                                                                                                                                                                                                                                                                                                                                                              Sequence 2, Application US/08962503
Patent No. 6087172
                              LENGTH: 32 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  59 TICTAAACAGTCATTTTCTAA 79
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1 UUCUAAACAGUCAUUUUCUAA 21
          SEQUENCE CHARACTERISTICS:
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TELEFAX: 619/678-5099
INFORMATION FOR SEQ ID NO: 2
SEQUENCE CHARACTERISTICS:
                                                                                          TOPOLOGY: linear MOLECULE TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 4.3
Best Local Similarity 57.1
Matches 12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nucleic acid
EDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TOPOLOGY: linear; MOLECULE TYPE: RNA
US-08-962-503-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: La Jolla
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100.0%; Pred. No. 4.1e-06;
Live 0; Mismatches 0; Indels
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Batent No. 6352829
GENERAL INFORMATION Alex
APPLICANT: Chenchik, Alex
Jokhadze, George
Bibliashvilli, Robert
TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                    oligonucleotide primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSED for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/225,928
FILING DATE: 05-Jan-1999
CLASSIFICATION: <UNKnown>
                                                                         APPLICATION UNBER: 08/859,998
FILING DATE: 21-MAY-1997
ATTORNEY/AGENT INFORMATION:
NAME: Field, Bret E.
REGISTRATION NUMBER: 37,620
REFRENCE/DOCKET NUMBER: 09096/002001
TELECOMMUNICATION INFORMATION:
TELEFAX: 415-322-5070
TELEFAX: 415-854-0875
INFORMATION FOR SEQ ID NO: 435:
SEQUENCE CHARACTERISTICS:
LENGTH: 32 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/859,998
FILING DATE: 21-MAY-1997
ATORNEY-AGENT INFORMATION:

NAME: Field, Bret E.

REGISTRATION NUMBER: 37,620

REFERENCE/DOCKET NUMBER: 09096/002001

TELECOMMUNICATION INFORMATION:

TELEPHONE: 415-322-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 2200 Sand Hill Road, Suite 100
APPLICATION NUMBER: US/09/225,928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE DESCRIPTION: SEQ ID NO: 435
US-09-225-928-435
                     FILING DATE: 05-Jan-1999
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: 415-854-0875
INFORMATION FOR SEQ ID NO: 436:
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                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
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Best Local Similarity 100.0
Matches 32; Conservative
                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
MOLECULE TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Menlo Park
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: US
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Gaps
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VES-011-30

VES-011-30

Sequence 10, Application US/08392317B

Patent No. 5795966

GENERAL INFORMATION:

APPLICANT: Grabstein, Kenneth

APPLICANT: Pettit, Dean

TITLE OF INVENTION:

NUMBER OF SEQUENCES: 10

CORRESPONDENCE ADDRESS:

ADDRESSE: Immunex Corporation

STREET: 51 University Street

CITY: Seattle

STATE: Washington

COUNTRY: USA

ZIP: 98101

COMPUTER REAABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC Compatible

OPERATING SYSTEM: Word for Windows 95, 7.0

SOFTWARE: PATENTIND NATA:

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/392,317B
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Best Local Similarity 100.0%; Pred. No. 0.57;
             ATTORNEY AGENT INFORMATION:
NAME: Halle, Ph.D. Lisa A
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 09326/002001
TELEPHONE: 619/678-5070
TELEPHONE: 619/678-5099
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 base pairs
TYPE: nucleic acid
STRANDENDENS: single
US/08/962,503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER: 32,655
REFERENCE/DOCKET NUMBER: 28.
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-587-0430
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       454 GTACATATTGTCCAAATGTTC 474
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ATTORNEY/AGENT INFORMATION:
NAME: Malaska, Stephen L.
REGISTRATION NUMBER: 32,6
                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 61.9'
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 36 base pairs
TYPE: nucleic acid
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                              TOPOLOGY: linear MOLECULE TYPE: RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
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TOPOLOGY: 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-392-317B-10
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      Sequence 4, Application US/08962503
; Sequence 4, Application US/08962503
; Patent No. 608172
; GENERAL INFORMATION:
    APPLICANT: Vecrapaneni, Dange
    APPLICANT: No. 6087172awa, Iwao
    TITLE OF INVENTION: RIBD2YMES TARGETED TO IL-15 MRNA
    NUMBER OF SEQUENCES: 11
    CORRESPONDENCE ADDRESS:
    STREET: 4225 Executive Square, Suite 1400
    CITY: La 4225 Executive Square, Suite 1400
    CITY: La 2011a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.3%; Score 21; DB 3; Length 21; 52.4%; Pred. No. 0.58;
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Patent No. 6081172

GENERAL INFORMATION:
APPLICANT: Hamanaka, Shoji
APPLICANT: Hamanaka, Shoji
TITLE OF INVENTION: RIBOZYMES TARGETED TO IL-15 MRNA
NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 4225 Executive Square, Suite 1400
                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATURG SYSTEM: Windows 95
SOFFWARE: Fast5EQ for Windows Version 2.0b
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/962,503
FILING DATE: 31-0CT-1997
ATTORREY/AGENT INFORMATION:
NAME: Haile, Ph.D., Lisa A
REGISTRATION NUMBER: 38.347
REFERENCE/DOCKET NUMBER: 09326/002001
TELEPHONE: 619/678-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OPERATING SYSTEM: Windows 95
SOFTWARE: FastSEQ for Windows Version 2.0b
CURRENT APPLICATION DATA:
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INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM Compatible
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Matches 11; Conservative
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MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                            COUNTRY: USA
ZIP: 92037
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; MOLECULE TYPE: RNA
US-08-962-503-4
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US-08-962-503-10
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0; Gaps 0; Indels Matches 21; Conservative 0; Mismatches

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3.7 7.6 817 10 B1756810 3.2 6.5 275 10 BF088272 3.0 6.1 554 9 AA863763 3.0 6.1 554 9 AA863763 3.0 6.1 554 9 AA863763 2.6 5.3 4.30 9 AA858938 2.5 4.7 420 9 AA858938 2.3 4.7 420 10 BF690327 2.3 4.7 458 9 BB625167 2.3 4.7 458 9 BB625167 2.3 4.7 538 9 AI120482 2.2 4.5 652 9 BB64509 2.1 4.3 687 12 AG09196 2.1 4.3 549 9 BB13361 2.0 4.1 224 9 BB13361 2.0 4.1 224 9 BB13366 2.0 4.1 224 9 BB135090 2.0 4.1 224 9 BB135090 2.0 4.1 225 9 BB135192	4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1	3.9 3.9 3.9 3.9 3.9 3.9 3.9 3.9
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Contact: Genoscope
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Email: seqref@genoscope.cns.fr, Web : www.genoscope.cns.fr.
Location/Qualifiers
                          Eukaryota; Metazoa, Chordata, Craniata, Vertebrata, Eutele
Mammalia; Eutheria, Primates; Catarrhini, Hominidae, Homo
1. (bases 1 to 994)
Li W.B., Gruber, C., Jessee, J. and Polayes, D.
Full.length cDMA libraries and normalization
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reaction. The driver was PCR-amplified cDNAs from pools of 5,000 clones made from the same 3 libraries. The pools consisted of I.M.A.G.E. clones 260232-265223,
340488-34479, and 484488-489479."
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Email: est@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information. Possible revesed clone: similarity on wrong strand Seq primer: -28ml3 rev2 ET from Amersham High quality sequence stop: 416.
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Athersys RAGE Library Homo sapiens CDNA, mRNA sequence.
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100.0%; Pred. No. 1.8e-143;
tive 0; Mismatches 0;
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Unpublished (1999)
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Harrington, J.J., Sherf, B., Rundlett, S., Jackson, P.D., Perry, R., Cain, S., Leventhal, C., Thornton, M., Ramachandran, R., Whittington, J., Lerner, L., Costanzo, D., McElligott, K., Boozer, S., Mays, R., Smith, F., Veloso, N., Kilka, A., Hess, J., Cothren, R., Lo, K., Offenbacher, J., Danaig, J. and Ducar, M. Creation of genome-wide protein expression libraries using random
                                                                                                                                                                                                                                                                                                                                                                 Libraries using Random Activation of Gene Expression', Nature Biotechnology, in press. Note that even though the cell type indicated is HT1080, since a random activation method was used, these sequence tags are not necessarily expressed in HT1080 under normal circumstances."
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
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/cblone_lib="akhersys RAGE Library"
/cell_line="HT1080"
/note="See (Creation of Genome-wide Protein Expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  385 GCAGGGCTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAATT 444
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Pred. No. 1.6e-122;
0; Mismatches 1;
                                                                                                                                                                      3201 Carnegie Ave, Cleveland, OH 44115, Tel: 216 431 9900
Fax: 216 361 9596
Email: scain@athersys.com
High quality sequence stop: 444.
Location/Qualifiers
1. 800
                                                                                                        Nat. Biotechnol. 19 (5), 440-445 (2001)
21227151
                                                                                                 gene expression
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EST.
                                                                                                                                            Contact: Scott J. Cain
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Best Local S
Matches 311
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BI832895 756 bp mRNA linear EST 04-OCT-2001 603082478Fl NIH_MGC_120 Homo sapiens CDNA clone IMAGE:5221771 5',
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /lab_host="DH10B"
//note="Organ: uterus; Vector: pCMV-SPORT6; Site_1: Sall;
Site_2: NotI: Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.48 kb. Life Technologies catalog #:
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 637)
NCI-CGAP http://www.ncbi.nlm.nih.gov/nclcgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          257 CAGCAATGAAGTGCTTTCTCTTGGAGTTACAAGTTATTCACTTGAGTCCGGAGATGCAA 316
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NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              47.6%; Score 233; DB 9; Length 637; 100.0%; Pred. No. 3.4e-108; Live 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                               /db_xref~"taxon:9606"
/clone~"IMAGE:2436724"
/clone_lib~"NCI_CGAP_Ut4"
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/organism="Homo sapiens"
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a 111 c
                                                                               Tumor Gene Index
Unpublished (1997)
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Seg primer: reverse ET
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                                                                                                                                                                                                                                                                                                                                     Chote="Organ: pooled pancreas and spleen; Vector:

PCMV-SPORT6; Site_1: NotI; Site_2: EcoRV (destroyed); RNA
SOUTCE anonymous pool of spleen and pancreas from 28 yo
male. Library is oligo-dT primed and directionally cloned
(EcoRV site is destroyed upon cloning). Average insert
size 1.5 kb, insert size range 1-2.5 kb. Library is
normalized and enriched for full-length clones and was
constructed by C. Gruber (Invitrogen). Research denetics
tracking code 025. Note: this is a NIH_MGC Library."
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1 (bases 1 to 872)
NIH-MGC http://mgc.ncl.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1991)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-rémail.nih.gov
Tissue Procurement: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
                 Email: cgapbs-rémail.nih.gov
Tissue Procurement: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAMISS7 row: k column: 20
High quality: sequence stop: 756.
Location/Qualifiers
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                                                                                                                                                                                                                                            /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="HAGE:5221771"
/clone_lib="NHH_MGC_120"
/lab_host="DH10B"
   Contact: Robert Strausberg, Ph.D.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

I (bases 1 to 471)

S Hillier, L., Clark, N., Dubuque, T., Elliston, K., Hawkins, M., Holman, M., Hultman, M., Kucaba, T., Le, M., Tennon, G., Marra, M., Parsons, J., Rifkin, L., Rohlfing, T., Soares, M., Tan, F., Trevaskis, E., Waterston, R., Williamson, A., Wohldmann, P. and Wilson, R.

The WashU-Merck EST Project
Upublished (1985)
Contact: Wilson RK
Washington University School of Medicine
Washington University School of Medicine
Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Coordinates of State 
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This clone is available royalty-free through LLNL ; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov.o column: 10
Plate: LLAM11487 row: o column: 10
High quality sequence start: 24
High quality sequence stop: 859.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           yz82q12.rl Soares_multiple_sclerosis_2NbHmSP Homo sapiens cDNA clone IMAGE:289606 5' similar to SW:IL15_HUMAN P40933 INTERLEUKIN-15 PRECURSOR ;, mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   35.2%; Score 172; DB 10; Length 872; 100.0%; Pred. No. 5.2e-77; ive 0; Mismatches 0; Indels
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/clone="IMAGE:5194977"
/clone_lib="NIH_MGC_114"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
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Email: asimpsoneludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=&t2=UT0071-050 900-144-B03&t3=2000-09-05&t4=1)
                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/db_xref="taxon:9606"
/db_xref="taxon:9606"
/dclone_lib="unw0088"
/dcs_tage="Adult"
/note="Organ: uterus; Vector: puc18; Site_1: SmaI; Site_2: SmaI; A mini-library was made by cloning products derived from ONESTES PCR (U.S. Letters Patent application No. 196 / 716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and CDNA amplification were performed under low
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BF095213 309 bp mRNA linear EST 19-OCT-2000 IL2-UT0071-050900-144-B03 UT0071 Homo sapiens CDNA, mRNA sequence. BF095213
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Mammalia; Eutheria: Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 309)
Dias Neto, E., Garcia Correa, R., Verjovski-Almeida, S., Briones, M.R., Goldman, G.H., Carralho, A.F., Matsukuma, A., Bala, G.S., Simpson, D.H., Goldman, G.H., Carralho, A.F., Matsukuma, A., Bala, G.S., Simpson, D.H., Brunstein, A., deoliveira, P.S., Bucher, P., Jongeneel, C.V., O'Hare, M.J., Soares, F., Brentani, R.R., Reis, L.F., de Souza, S.J. and
                    Fax: +55-11-270701

Email: asimpson@ludwig.org.br

This sequence was derived from the FAPESP/LICR Human Cancer Genome

Project. This entry can be seen in the following URL

(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=&t2=PM4-UM0088-050

400-001-dl2&t3=2000-04-05&t4=1)

Seq primer: puc 18 forward

High quality sequence stop: 494.
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Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shotgun sequencing of the human transcriptome with ORF expressed
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20202663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 82; DB 9; Length 494; Pred. No. 5.5e-31; 0; Mismatches 0; Indels
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Fax: +55-11-2707001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 100.
Matches 82, Conservative
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1 (Dases I to 494)

10 dases I to 494)

10 dases I. to 494)

Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F., Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H., Brunstein,A., deoliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare Simpson,A.J.
                                                                                                                                                                                                                                                                                             /tissue_type="multiple sclerosis lesions"
Ade_stage="Age 46"
/lab_host="DHJ08 (ampicillin resistant)"
/note="Vector: pT7T3D (Pharmacia) with a modified
/note="Vector: pT7T3D (Pharmacia) with a modified
/note="Vector: pT7T3D (Pharmacia) with a modified
/lote="Vector: pT7T3D (Pharmacia) with a mod
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shotgun sequencing of the human transcriptome with ORF expressed
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                                                                                                                                                                                                                                   /clone_lib="Soares_multiple_sclerosis_2NbHMSP"
/sex="male"
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Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
20202663
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/db_xref="GDB:3905446"
Location/Qualifiers
                                                                                                                                                                 /db_xref="taxon:9606"
                                                                                                                                                                                                    /clone="IMAGE:289606"
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423 AACACTTCTTGA 412
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                                                                                                                                                      /note="Organ: uterus_tumor; Vector: puc18; Site 1: Smal; Site.2: Smal; A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Lidwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AW804165 483 bp mRNA linear EST 16-MAY-2000 PM4-UM0088-050400-001-c11 UM0088 Homo sapiens cDNA, mRNA sequence. AW804165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fax: +55-11-2707001
Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=&t2-PM4-UM0088-050 400-001-cl1&t3=2000-04-05&t4=1)
Seq primer: puc 18 forward
High quality sequence stop: 483.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shotgun sequencing of the human transcriptome with ORF expressed sequence tags
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20202663
                                                                                                                                                                                                                                                                                                                                                                            15.7%; Score 77; DB 10; Length 309; 100.0%; Pred. No. 2.1e-28; Live 0; Mismatches 0; Indels
                                                                             /organism="Homo sapiens"
/db_xref="taxon:9606"
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/db_xref="taxon:9606"
/clone_lib="UM0088"
Seq primer: puc lo LOLWALL
High quality sequence stop: 309.
Location/Qualifiers
                                                                                                                   /clone_lib="UT0071"
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/dev_stage="Adult"
/note="Organ: uterus; Vector: puc18; Site_1: SmaI; Site_2: SmaI, A mini-library was made by clouding products derived from ORESTES PER (U.S. Letters Patent application No. 196 /716 - Ludwig Institute for Cancer Research) profiles into the puc 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions."
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammala; Eutheria; Primates; Catarrhini; Hominidae; Homo.
I (bases 1 to 301)
Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R., Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F., Garlan,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H., Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and Simpson,A.J.
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Fax: +55-11-2707001

Email: ssimpsoneludwig.org.br

This sequence was derived from the FAPESP/LICR Human Cancer Genome

Project. This entry can be seen in the following URL

(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=&t2=CM1-HT0875-060

Seq primer: puc IB forward

High quality sequence start: 52

High quality sequence stop: 301.
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Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          418 GAGGAAAAAAATATTAAAGAATTTTTGCAGAGTTTTGTACATATTGTCCAAATGTTCATC 477
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                                                                                                                                                                                                                                                                                                                                                                                       Length 483;
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                                                                                                                                                                                                                                                                                                                                                                          14.7%; Score 72; DB
ilarity 100.0%; Pred. No. 7.2
Conservative 0; Mismatches
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/organism="Homo sapiens"
/db_xref="taxon:9606"
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Mammalla; Eutherla; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 474)

S. Hiller, L., Clark, N., Dubuque, T., Elliston, K., Hawkins, M., Holman, M., Hultman, M., Kucaba, T., Le, M., Lennon, G., Marra, M., Parsons, J., Rifkin, L., Rohlfing, T., Soares, M., Tan, F., Trevaskis, E., Waterston, R., Williamson, A., Wöhldmann, P. and Wilson, R.

The Washu-Werck EST Project
Unpublished (1995)
Contact: Wilson RK
Washington University School of Medicine
Washington University School of Medicine
Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 double-stranded CDNA was size selected, ligated to ECO RI adapters (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of a modified pr7r3 vector (Pharmacia). Library went through one round of normalization to a Cot = 5. Library constructed by Bento Soares and M.Fatima Bonaldo. RNA from 4 multiple sclerosis lesions from one patient was kindly provided by Dr. Kevin G. Becker (NINDS/NIH).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /lab_host="DH10B (ampicillin resistant)"
/note="Vector: pT7T3D (Pharmacia) with a modified
polylinker V_TYPE: phagemid; Site_1: Not I; Site_2: Eco RI
; lst strand CDNA was primed with a Not I - oligo(dT)
                                                                                                                                                                                                                                                                                                                                                                                                                     N49734 Ilinear EST 14-FEB-1996 yz06012.s1 Soares_multiple_sclerosis_aZNbHMSP Homo sapiens cDNA clone IMAGE:282239 3' similar to SW:ILI5_HUMAN P40933 INTERLEUKIN-15 PRECURSOR; mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Email: estewatson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
Seq primer: ml3 -40 forward
High quality sequence stop: 263.
Location/Qualifiers
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/db_xref="taxon:9606"
/clone="INAGE:282239"
/sex="male"
                                                                                                                                                              ;
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/dev_stage="Age 46"
                                                                                                                                                              0; Indels
                                                                                                                12.9%; Score ...
100.0%; Pred. No. 3e-7
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/note="Organ: head_neck; Vector: pucl8; Site_1: Smal; Site_2: Smal; A mini-library was made by cloning products derived from ORESTS PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under to some state of the publications of the publication of the publication of the publications of the publication were performed under the public state of the publications of the public publications of the public pub
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Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtm12.pl?tl=£t2=RC3-HT0600-170
300-011-e04&t3=2000-03-17&t4=1)
seq primer: puc 18 forward
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1 (bases I to 278)
1 bases I to 278)
1 bases I to 278
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1 koarda Correa, R., Verjovaki-Almeida, S., Briones, M.R., Solasi, M.A., da Silva, W. Jr., Zago, M.A., Bordin, S., Costa, F.F., Goldman, G.H., Carvalho, A.F., Matsukuma, A., Bala, G.S., Simpson, D.H., Brunatein, A., deoliyekira, P.S., Bucher, P., Jongeneel, C.V., O'Hare, M.J., Soares, F., Brentani, R.R., Reis, L.F., de Souza, S.J. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BE177883 27-JUN-2000 RC3-HT0600-170300-011-e04 HT0600 Homo sapiens CDNA, mRNA sequence. BE177883
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Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
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Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
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11.0%; Score 54; DB 9; Le
Best Local Similarity 100.0%; Pred. No. 1.2e-16;
Matches 54; Conservative 0; Mismatches 0;
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                         Score 55; DB 10;
Pred. No. 3.5e-17;
11.2%; Sco...
100.0%; Pred. No. ...
0; Mismatches
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/db_xref="taxon:9606"
/clone_lib="HT0600"
/dev_stage="Adult"
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High quality sequence stop: 278.
Location/Qualifiers
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                                                                                                                                     Conservative
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expressed

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/Organism="Homo sapiens"
/db_xref="taxon:9606"
/db_xref="taxon:9606"
/dclone_lib="UT0023"
/dev_stage="Adult"
/note="Organ: uterus_tumor; Vector: puc18; Site_1: SmaI;
Site_2: SmaI; A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research)
profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under
                                                                                                                                                                                                                                                                                                                                      Tel: +55-11-2704922

Fax: +55-11-2707001

Bmail: asimpson@ludwig.org.br

This sequence was derived from the FAPESP/LICR Human Cancer Genome

Project. This entry can be seen in the following URL

(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=&t2=RC2-UT0023-290

700-011-b01&t3=2000-07-29&t4=1)

Seq primer: puc 18 forward

High quality sequence start: 7

High quality sequence stop: 548.

1. 550
    Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F., Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H., Brunstein,A., deoliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and Simpson,A.J.
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Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Bukaryota, Metazoa; Chordata; Catarrhini; Hominidae; Homo.

1 (bases 1 to 166)
Dias Neto, E., Garcia Correa, R., Verjovski-Almeida, S., Briones, M.R., Nagai, M.A., Bordin, S., Costa, F.F., Nagai, M.A., Bordin, S., Costa, F.F., Brunstein, G.H., Carvalho, A.F., Matsukuma, A., Baia, G.S., Simpson, D.H., Brunstein, A., deoliveira, P.S., Bucher, P., Jongeneel, C.V., O'Hare, M.J., Soares, F., Brentani, R.R., Reis, L.F., de Souza, S.J. and
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Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
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20202663
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20202663
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Best Local Similarity 100.0
Matches 52; Conservative
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AUTHORS
                                                                                                                                                                            JOURNAL
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/db_xref="taxon:9606"
/clone="InMAGE:2202523"
/clone="InMAGE:2202523"
/clone="InMAGE:2202523"
/clone="Organ: pooled lung and spleen; Vector: pcMV-SPORT6; Site_1: NOLI: Site_2: EcoRV (destroyed); RNA source anonymous pool of 24 week female lung, 16 week female spleen, and 20-22 week male spleens. Library is oligo-dr primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert.size 14 kb, insert size range 1-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (InVitrogen). Research Genetics tracking code 026. Note:
                                                                                                                     B1766231 718 bp mRNA linear EST 25-SEP-2001
603052877F1 NIH_MGC_122 Homo sapiens cDNA clone IMAGE:5202523 5',
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RC2-UT0023-290700-011-b01 UT0023 Homo sapiens cDNA, mRNA sequence.
BE698667
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1 (bases 1 to 550)
Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
                                                                                                                                                                                                                                                                           Homo sapiens
Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia: Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 718)
NIH-MGC http://mgc.nci.nih.gov/.
NIH-MGC http://mgc.nci.nih.gov/.
Ontional Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov
Tissue cyapbs-remail.nih.gov
Tissue cyapbs-remail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM11507 row: 1 column: 20
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100.0%; Pred. No. 1...
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184 c 188 g 201 t
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Location/Qualifiers
1. 718
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Best Local Similarity 100.0
Matches 54; Conservative
                                                                                                                                                               mRNA sequence.
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                                                                                          BI766231
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                                                                                                                                                                                                                                                                                                                                         37; Conservative
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20202663
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Matches 3
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BF088272/c
                                                                                                                                                                                                                BASE COUNT
ORIGIN
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1 (Dases 1 to 817)

1 (Dases 1 to 817)

1 National Institutes of Health, Mammalian Gene Collection (MGC)

1 National Institutes of Health, Mammalian Gene Collection (MGC)

2 Ontact: Robert Strausberg, Ph.D.

2 Email: cgapbs-rémail.nih.gov

1 Issue Procurement: Life Technologies, Inc.

2 CONA Library Preparation: Life Technologies, Inc.

2 CONA Library Arrayed by: The Technologies, Inc.

3 CONA Library Arrayed by: The T.M.A.G.E. Consortium (LINL)

3 DNA Sequencing by: Incyte Genomics, Inc.

3 Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at:

4 http://mage.llh.gov

5 Plate: LiAMI1487 row: n. column: 21
                                                                                                                                                                                                                                                                                                                                                                                                     /note="Organ: uterus_tumor; Vector: puc18; Site_1: Smal; Site_2: Smal; A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludy Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BI756810 817 bp mRNA linear EST 25-SEP-2001
603024487F1 NH_MGC_114 Homo sapiens CDNA clone IMAGE:5194964 5',
                                                                                                                         Fax: +55-I1-2707001
Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=RC2&t2=RC2-UT0023-
110800-015-908_lat3=2000_08-11&t4=1)
Seq primer: puc 18 forward.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 166;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
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100.0%; Pred. No. ...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 low stringency conditions."
26 c 33 g 47 t
                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone_lib="UT0023"
/dev_stage="Adult"
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/db_xref="taxon:9606"
/clone="IMAGE:5194964"
/clone_lib="NIH_MGC_114"
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High quality sequence stop: 711.
Location/Qualifiers
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BI756810
BI756810.1 GI:15748388
                                                                                                        rel: +55-11-2704922
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Matches 49; Conser
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                                                                                      Brazi]
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JOURNAL
COMMENT
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AUTHORS
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      COMMENT
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Tel: +55-11-2704922
Fax: +55-11-2707001
Enail: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl-&t2-CMl-HT0875-060
900-385-a05&t3-2000-09-06&t4-1)
Seq primer: puc 18 forward
High quality sequence start: 4
High quality sequence start: 4
High quality sequence stop: 275.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostoml;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 275)
Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
Nagal,M.A., da Sllva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
Goldman,G.H., Carvalho,A.F., Matsukuma,A., Bala,G.S., Slmpson,D.H.,
Brunstealn,A., deOllvaira,P.S., Bucher,P., Jongeneel,C.V., O'Hare
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note="Organ: head_neck; Vector: puc18; Site_1: SmaI; Site_2: SmaI; A mini-library was made by cloning products derived from OrESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research) profiles into the puc18 vector. Reverse transcription of tissue mRNA and CDNA amplification were performed under low stringency conditions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BF088272 275 bp mRNA linear EST 19-OCT-2000 CM1 HT0875-060900-385-a05 HT0875 Homo sapiens CDNA, mRNA sequence.
/note="Organ: brain; Vector: pCMV-SPORT6; Site_1: NotI; Site_2: EcoRV (destroyed); RNA source anonymous pool of 6 male brains, age range 23-27 yo. Library is oligo-dr primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.5 kb, insert size range 1-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 019. Note: this is a NIH_MGC Library.
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Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Shotgun sequencing of the human transcriptome with ORF expressed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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Sequence tags
Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 817;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7.6%; Score 37; DB 10; 1
100.0%; Pred. No. 5.4e-08;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        82 GAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCA 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 651 GAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCA 687
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/db_xref="taxon:9606"
/clone_lib="HT0875"
/dev_stage="Adult"
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Gaps

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Indels

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house mouse.
Mus musculus
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          30;
                                                                                                                                                                           DEFINITION
                                                                                                                             RESULT 21
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KEYWORDS
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0
                                                                                                                                                                                                                                                          EST 11-MAR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 564)
Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T.,
Gelsel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M.,
Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B.,
Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and
                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                       AA863763 54 bp mRNA linear EST 11-MAR-199 vX08607.rl Soares_thymus_2NbMT Mus musculus cDNA clone MAGE:1263853 5' similar to 9b:U14332 Mus musculus interleukin 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                         Gaps
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The WashU-HHMI Mouse EST Project
Uppublished (1996)
Contact: Marra M/Mouse EST Project
WashU-HHMI Mouse EST Project
WashU-HHMI Mouse EST Project
WashU-HHMI Mouse EST Project
WashU-HHMI Mouse EST Project
WashIngton University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: mouseest@watson.wustl.edu
                                                                        Length 275;
                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="IMAGE:1263853"
/clone_lib="Soares_thymus_2NbMT"
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/lab_host="DH10B"
                                                                   6.5%; Score 32; DB 10; I
100.0%; Pred. No. 2.1e-05;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MGI:666405
Seq primer: -28ml3 rev2 ET from Amersham
High quality sequence stop: 433.
Location/Qualifiers
     92
                                                                                                                                427 AATATTAAAGAATTTTTGCAGAGTTTTGTACA 458
                                                                                                                                                  260 AATATTAAAGAATTTTTGCAGAGTTTTGTACA 229
       δ
     45
                                                                                                                                                                                                                                                                                                     (MOUSE); mRNA sequence.
AA863763
AA863763.1 GI:2956242
     O
                                                                                                      32; Conservative
     48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Waterston, R.
                                                                                                                                                                                                                                                                                                                                                                          house mouse.
                                                                                    Best Local Similarity
     æ
   9
                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
ORGANISM
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ORIGIN
BASE COUNT
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                                                                                                                                                                                                                     RESULT 20
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JOURNAL
COMMENT
                                                                                                  Matches
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                                                                                                                                                                                                                                     AA863763
                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
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                 ORIGIN
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Length 564;

Score 30; DB 9; L Pred. No. 0.00021;

6.1%; £

Best Local Similarity

Query Match

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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia: Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1 (bases 1 to 590)
Marram., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T., Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M.,
Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and
Waterston,R.

The WashU-HHMI Mouse EST Project
U pubblished (1996)
Contact: Marra M/Mouse EST Project
WashU-HHMI Mouse EST Project
WashU-HHMI Mouse EST Project
WashU-HMI Mouse EST Project
WashU-HMI Mouse EST Project
Tal: 314 286 1800
Fax: 314 286 1810
                                                                                                                                       vk38h11.rl Soares_mammary_gland_NbMMG Mus musculus cDNA clone IMAGE:048933 5' similar to gb:U14332 Mus musculus interleukin 15 AA544986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="Organ: mammary gland; Vector: pT/T3D-Pac (Pharmacia Vert a modified polylinker; Site_1: Not I; Site_2: Eco RI; 1st strand cDNA was primed with a Not I - oligo(dT) primer [5'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /db_xref="taxon:10090"
/clone="range:048933"
/clone_lib="Soares_mammary_gland_NbwMG"
/sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 30; DB 9; Le
Pred. No. 0.00021;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Seq primer: -28ml3 rev2 ET from Amersham
High quality sequence stop: 464.
Location/Qualifiers
1. .590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /tissue_type="mammary gland"
/dev_stage="4 weeks"
/lab_host="DH10B"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6.1%; Score 30; DB
ilarity 100.0%; Pred. No. 0.0
Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Mus musculus"
85 GCTGGCATTCATGTCTTCATTTTGGGCTGT 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: mouseest@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            531 GCTGGCATTCATGTCTTCATTTTGGGCTGT 560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCTGGCATTCATGTCTTTTTGGGCTGT 114
                          362 GCTGGCATTCATGTCTTCATTTTGGGCTGT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /strain="C57BL/6J
                                                                                                                                                                                                                                                                       AA544986.1 GI:2306060
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Best Local Simi
Matches 30;
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Gaps

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The sequence tag present in the CDNA between the NotI site and the oligo-dr track served to identify it as a clone from the normalized adult Lung library. CDNA Library Preparation: M. Fatima Bonaldo, Ph.D. Clone distribution: clones will be available through Research Genetics This clone is also available through the I.M.A.G.E. Consortium at LLNL (info@image.llnl.gov). IMAGE ID=1767474 The following repetitive elements were found in this CDNA sequence: 1-24, >AT_ICH#Low_complexity
Seq primer: Mi3 Forward
Eukaryota; Métazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
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/db.xerf="texton:10116"
/clone="UT-R-A0-aj-a-01-0-UI"
/clone="UT-R-A0-aj-a-01-0-UI"
/dev_stage="adult"
/lab_host="DH10B (Life Technologies)"
/note="Vector: pT73D-Peac (Phermecia) with a modified
polylinker; Site_1: Not I; Site_2: Eco RI; This library
consists of a mixture of individually tagged normalized
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 430)
Bonaldo,M.F., Lennon,G. and Soares,M.B.
Normalization and subtraction: two approaches to facilitate gene
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Program for Rat Gene Discovery and Mapping
University of Iowa
451 Eckstein Medical Research Building Iowa City, IA 52242, USA
Tel: 319 335 8250
Fax: 319 335 9565
Email: msoares@blue.weeg.ulowa.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AA858938
UI-R-AO-aj-a-01-0-UI.S3 UI-R-AO Rattus norvegicus cDNA clone UI-R-AO-aj-a-01-0-UI 3 UI-R-AO Rattus norvegicus cDNA clone norvegicus interleukin-15 mRNA, complete cds, mRNA sequence. AA858938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         On Mar 10, 1998 this sequence version replaced g1:2948289
                                                                                                                                                                                                                                                                                                                                                                                                                     Length 631;
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                                                                                                                                                                                                                                                                                                                                                                                                                  Score 30; DB 9; Lo Pred. No. 0.00021;
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97044477
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100.0%; Prec
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Rattus norvegicus
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1 (bases 1 to 631)
Arakawa,T., Carninci,P., Fukuda,S., Furuno,M., Hanagaki,T., Hara,A.,
Hiramoto,K., Hori,F., Ishii,Y., Ito,M., Kawai,J., Konno,H., Kouda,M., Koya,S., Matsuyama,T., Miyazaki,A., Nomura,K., Ohno,M., Okazaki,Y., Okido,T., Saito,R., Sakai,C., Sakai,K., Sano,H., Sasaki,D., Shibata,K., Shinagawa,A., Shiraki,T., Sogabe,Y., Suzuki,H.,
Tagami,M., Tagawa,A., Takahashi,F., Takeda,Y., Tanaka,T., Toya,T.,
RIKEN Mouse Ests (Arakawa,T., et al. 2001)
Contact: Yoshihide Hayashizaki,Y.
Inpublished (2001)
Contact: Yoshihide Hayashizaki
Isboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center(GSC), Yokohama Institute
The Institute of Physical and Chemical Research (RIKEN)
1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan Tel: 81-45-503-9216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Email: genome-res@gsc.riken.go.jp,

URL:http://genome-res@gsc.riken.go.jp,

Carninci.p., Shibata,Y., Hayatsu,M. and Hayashizaki,Y.

Carninci.p., Shibata,Y., Hayatsu,M. and Hayashizaki,Y.

M., Konno,H., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y.

Normalization and subtraction of cap-trapper-selected cDNAs to
prepare full-ineith cDNA libraries for rapid discovery of new
genes. Genome Res. . 10 (10), 1617-1630 (2000)

wagi,K., Fujiwake,S., Inoue,K., Togawa,Y., Izawa,M., Ohara,E.,
Watahiki,M., Yoneda,Y., Ishikawa,T., Ozawa,M., Tanaka,T., Matsuura
,S., Kawai,J., Okazaki,Y., Muramatsu,M., Inoue,Y., Kira,A. and
Hayashizaki,Y.

RIKEN integrated sequence analysis (RISA) system--384-format
sequencing pipeline with 384 multicapillary sequencer. Genome Res.

10 (11), 1757-1771 (2000)

Konno,H., Fukunishi,Y., Shibata,K., Itch,M., Carninci,P., Sugahara
,Y. and Hayashizaki,Y.

Computer-based methods for the mouse full-length cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      encyclopedia: real-time sequence clustering for construction of a nonreadundant cDNA library. Genome Res. . Il (2), 281-289 (2001) Kondo, S., Shinagawa, A., Saito, T., Kiyosawa, H., Yamanaka, I., Aizawa, K., Fukuda, S., Hara, A., Itoh, M., Kawai, J., Shibata, K. and
                                                                                                                           BB661271 RIKEN full-length enriched, 0 day neonate kidney Mus musculus CDNA clone D630033E03 5', mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hayashizaki,Y. Computational Analysis of Full-Length Mouse cDNAs Compared with Human Genome Sequences. Mamm. Genome. 12, 673-677 (2001)
Please visit our web site (http://genome.gsc.riken.go.jp) for further details.
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/dev_stage="0 day neonate"
/lab_host="DH10B"
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/organism="Mus musculus"
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Length 429;

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Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 429)
Marrah., Hiller,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T.,
Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M.,
Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B.,
Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and
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                                                                                                                                                                                                                                                                                                                                                                   EST 11-MAR-1998
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                              429 bp mRNA linear EST 11-MAR-199 vx87e05.r1 Soares_thymus_2NbMT Mus musculus cDNA clone IMAGE:1282208 5' similar to gb:U14332 Mus musculus interleukin 15 abagaan.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
TMAGE consortium (info@image.llnl.gov) for further information.
MGI:674008
Seq primer: -28ml3 rev2 ET from Amersham
High quality sequence stop: 415.
Location/Qualifiers
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The WashU-HHMI Mouse EST Project
Unpublished (1996)
Contact: Marra MyMouse EST Project
WashU-HHMI Mouse EST Project
WashIngton University School of Medicinep
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Fax: 314 286 1800
                                                                                                                                                                  Length 430;
                                                                                                                                                                                                  0; Indels
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/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="InAGE:1282108"
/sex="male" Soares_thymus_2NbMT"
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/lab_host="DH10B"
                                                                                                                                                             5.7%; Score 28; DB 9; 1
100.0%; Pred. No. 0.0023;
ative 0; Mismatches 0;
                                                                                                                                                                                                                                                      325 TACATATTGTCCAAATGTTCATCAACAC 298
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Best Local Similarity
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Tel: 5152944352

Fax: 515294401

Email: ckugglediastate.edu

Email: ckugglediastate.edu

The sequence contained an oligo-dT track that was present in the cligonucleotide that was used to prime the synthesis of first strand cDNA and therefore this may represent a bonafide poly A tail. The sequence tag present in the cDNA between the NotI site and the oligo-dT track served to verify it as a clone from the non-normalized ovary at estrus day 12 library CDNA Library preparation: RJ Woods, JA Green, RS Prather S142 Animal Science Missouri-Columbia, 65211 Clone distribution: Glones will be available through Research Genetics (www.resgen.com) The following repetitive elements were found in this cDNA sequence: 1-28, Seq primer: MI3 Forward

POLYA-Yes.
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/db_xref="taxon:9823"
/clone="ith-forms aba-f-02-1-UM"
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/note="vector: pT/73b-pac (Pharmacia) with a modified
polylinker; Site_1: Not I; Site_2: EcoRI; The MIP-03
library is derived from ovary at estrus day 12. For a
detailed description of the library from which this clone
was derived, please visit our web site at
http://pigest.genome.iastate.edu/.
                                                                                                                                                                                                                                                                                                                         BF704348 515 bp mRNA linear EST 22-DEC-2000 MI-P-03-aba-f-02-1-UM.sl MI-P-03 Sus scrofa cDNA clone MI-P-03-aba-f-02-1-UM 3', mRNA sequence.
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Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
1 (bases 1 to 515)
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Normalization and subtraction: two approaches to facilitate gene
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Molecular Genetics Laboratory, Department of Animal Science
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o. 0.024;
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201 Kildee Hall, Ames, IA 50011-3150, USA
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iive 0; Mismatches
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                                                                                                                           85 GCTGGCATTCATGTCTTCATTTTGGG 110
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TAG_TISSUE=Ovary
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                                                                          Conservative
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Sus scrofa
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Length 515;

5.3%; Score 26; DB 10;

Query Match

Gaps

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ò g

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/sax="female_(lattating)"
//sax="female_(lattating)"
/tissue_type="mammary gland"
/tissue_type="mammary gland"
/tissue_type="mammary gland"
/tissue_type="mammary gland"
/note="Vector: pT73D-Pac (Pharmacia) with a modified
polylinker; 1st strand cDNA was prepared from mammary
gland tissue from a lactating female, and was then primed
with a Not I - oligo(dT) primer. Double-stranded cDNA was
ligated to Eco RI adaptors (Pharmacia), digested with Not
I and cloned into the Not I and Eco RI sites of the
modified pT73J vector. Library is normalized. Library
was constructed by Bento Soares and M. Fatima Bonaldo."
26 a 87 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BE690327 11-SEP-2000 uw66b02.yl Soares_mammary_gland_NMLMG Mus musculus cDNA clone IMAGE:3466923 5' similar to gb:014332 Mus musculus interleukin 15
                                                                                                                 Lennon and Soares, Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 420)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCI-(GAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
Tumor Gene Index
Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
Email: capabs-remail.nih.gov
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
                   double-stranded circles and electroporated bacteria (LifeTechnologies) to generate the NIH_BMAP_MS3.2 library. This procedure has previously described (Bonaldo, Lennon and Shesearch 6:791-806, 1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 4.7%; Score 23; DB 10; Length 420; Best Local Similarity 100.0%; Pred. No. 0.82; Matches 23; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                  DB 9; Length 405; 0.82;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
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/clone="IMAGE:3466923"
/clone_11b="Soares_mammary_gland_NMLMG"
                                                                                                                                                                                                                                                                                                                                                                                 4.7%; scc...
100.0%; Pred. No. v...
... 0; Mismatches
                                                                                                                                                                                                                                                                             130 t
                                                                                                                                                                     TAG_LIB=NIH_BMAP_M_S3.2
TAG_TISSUE=pineal-glands
TAG_SEQ=CAAAC"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Seq primer: -40RP from Glbco
                                                                                                                                                                                                                                                                          73 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          460 ATTGTCCAAATGTTCATCAACAC 482
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                                                                                                                                                                                                                                                                                83 c
                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 100.
Matches 23; Conservative
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BE690327/c
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ORIGIN
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/clone="UI-W-BH2.2-aom-e-04-0-UI"
/clone="UI-W-BH2.2-aom-e-04-0-UI"
/clone="UI-W-BH2.2-aom-e-04-0-UI"
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/clone="UI-W-BH2.2-aom-e-04-0-UI"
/dev_stage="27-32 days"
/dev_stage="27-32 days"
/lab_host="Det | Detail 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The Sequence contained an oligo-dT track that was present in the coligonucleotide that was used to prime the synthesis of first clingenucleotide that was used to prime the synthesis of first strand cDNA and therefore this may represent a bonafide poly A tail. The sequence tag present in the cDNA between the Norls site and the oligo-dT track served to identify it as a clone from the normalized pineal glands library cDNA Library Preparation: M.B. Soares Lab Clone distribution: NIH BMAP cDNA clones will be made available by the means for distribution of the BMAP cDNA clones, this record will be updated accordingly when that means is determined. BOUNA-Yes.
                                                                                                                                                                                                                                                                                                                                       AW121368 405 bp mRNA linear EST 22-OCT-1999 UI-M-BH2.2-aom-e-04-0-UI.sl NIH_BMAP_M_S3.2 Mus musculus cDNA clone UI-M-BH2.2-aom-e-04-0-UI 3', mRNA sequence.
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Mammalla; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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Bonaldo,M.F., Lennon,G. and Soares,M.B.
Normalization and subtraction: two approaches to facilitate gene
                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Chin, H
National Institute of Mental Health
6001 Executive Blvd. Room 7N-7190, MSC 9643, Bethesda, MD
                                                             ö
Pred. No. 0.024;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Mus musculus"/strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Genome Res. 6 (9), 791-806 (1996)
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                                                                                                                        388 GAATCTGGATGCAAGAATGTGAGA 413
                                                                                                                                                                                     413 GAATCTGGATGCAAAGAATGTGAGGA 388
                                                             ;
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EST.
                             100.08;
                                Best Local Similarity 100.0
Matches 26; Conservative
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Fax: 301 443 9890
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AW121368/c
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TITLE
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KEYWORDS
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COMMENT

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Gaps

us-09-724-841-1.oli12.rst

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AL Unpublished (2001)
Contact: Yoshihide Hayashizaki
Laboratory for Genome Exploration Research Group, RIKEN Genomic
Sciences Center(GSC), Yokohama Institute
Sciences Center(GSC), Yokohama Institute
The Institute of Physical and Chemical Research (RIKEN)
1-7-22 Suchiro-Cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan
Tel: 81-45-503-9216
Email: genome-reségsc.riken.go.jp,
URL:http://genome-gsc.riken.go.jp,
URL:http://genome-gsc.riken.go.jp,
URL:http://genome-gsc.riken.go.jp,
URL:http://genome-gsc.riken.go.jp,
Oarninci,P., Shibata,Y., Hayasu,N., and Hayashizaki,Y.
Normalization and subfraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapid discovery of new
Wayi,K., Fujiwake,S., Inoue,K., Togawa,Y., Izawa,M., Ohara,E.,
Watahiki,M., Yoneda,Y., Ishikawa,T., Ozawa,K., Tanaka,T., Mataura
SS., Kawai,J., Okazaki,Y., Muramatsu,M., Inoue,Y., Kira,A. and
Hayashizaaki,Y.
RIKEN integrated sequence analysis (RISA) system-384-format
sequencing pipeline with 384 multicapillary sequencer. Genome Res. .
(O (11), 1757-1771 (2000)
V. and Hayashizaki,V. and Hayashizaki,V. sugahara
                                                             Mammalia: Butheria; Rodentia: Craniata; Vertebrata; Euteleostomi; Mammalia: Eutheria; Rodentia: Sciurognathi; Muridae; Murinae; Mus. 1 (bases I to 458)

Akimura, T., Arakawa, T., Carninci, P., Furuno, M., Hanagaki, T., Hayatsu, N., Hiramoto, K., Hiraoka, T., Hirozane, T., Imotani, K., Ishii, Y., Konno, H., Kouda, M., Matsuyama, T., Makamura, M., Nishi, K., Nommra, K., Numasaki, R., Okazaki, Y., Okido, T., Salto, R., Sakai, C., Sakai, K., Sakazume, N., Sasaki, D., Sato, K., Shinagawa, A., Shiraki, T., Sogabe, Y., Suzuki, H., Tagawa, A., Takahashi, F., Takaku-Akahira, S., Tanaka, T., Tomaru, A., Tayawi, Watahiki, A., Tasunishi, A., Muramatsu, M., and Hayashizaki, Y., Riken Encyclopedia of Mouse Full-length cDNAs (Akimura, T., et al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AI120615

UC28h10.rl Soares_mammary_gland_NbMMG Mus musculus cDNA clone
IMAGE:1399363 5' similar to gb:U14332 Mus musculus interleukin 15
(MOUSE);, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             encyclopedia: real-time sequence clustering for construction of nonredundant cDNA library. Genome Res. . 11 (2), 281-289 (2001) Please visit our web site (http://genome.gsc.riken.go.jp) for further details.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /clone_lib="RIKEN full-length enriched, mammary gland RCB-0526 Jyg-MC(A) cDNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'Y. and Hayashizaki,Y. Computer-based methods for the mouse full-length cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.7%; Score 23; DB 9; Length 458; 100.0%; Pred. No. 0.81; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /tissue_type="mammary gland"
/cell_line="RCB-0526 Jyg-MC(A)"
89 c 95 g 137 t
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/clone="G830036M09"
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1. .458
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                      house mouse.
Mus musculus
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Best Local Similarity
Matches 23; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            137
                                               ORGANISM
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COMMENT
                                                                                                                           REFERENCE
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                                                                                                                                                          AUTHORS
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Vk38h12.x1 Soares_mammary_gland_NbMMG Mus musculus cDNA clone
IMAGE:948935 3' similar to gb:U14332 Mus musculus interleukin 15
A1503618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13/; double-stranded CDNA was ligated to ECC RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and ECC RI sites of the modified pr773 vector. RNA provided by Dr. Minoru Ko, Wayne State Univ. Library constructed and normalized by Bento Soares and M.Fatima
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note="Organ: mammary gland; Vector: pT7T3D-Pac (Pharmacia Vith a modified polylinker; Site_1: Not I; Site_2: Eco RI; 1st strand cDNA was primed with a Not I - oligo(dT) primer [5]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BB825167 RIKEN full-length enriched, mammary gland RCB-0526 Jyg-WC(A) cDNA Mus musculus cDNA clone G830036M09 3', mRNA BB825167 BB825167.1 GI:17003410
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This clone was previously sequenced on the 5' end only, this new data is from the 3' end High quality sequence stop: 379.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
MGI:545791
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/db_xref="taxon:10090"
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/sex="male"
/tissue_type="mammary gland"
/dev_stage="4 weeks"
/lab_host="DH10B"
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100.0%; Pred. No. 0.81;
tive 0; Mismatches 0; Indels
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/organism="Mus musculus"
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304 ATTGTCCAAATGTTCATCAACAC 282
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                                                                                                                                                                                                                                                                 AI503618.1 GI:4401469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tumor Gene Index
Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bonaldo."
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Mus musculus
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                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                  ACCESSION
VERSION
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SOURCE
ORGANISM
                                                                                                    AI503618/c
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BB825167
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KEYWORDS
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/organism="Mus musculus"
/db_xref="taxon:10090"
/db_xref="taxon:10090"
/clone="INAGE:1477457"
/clone=lib="Soares.nammary_gland_NMLMG"
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/lab_host="bH10B"
/note="vector: pT73D-pac (Pharmacia) with a modified
/note="vector: pT73D-pac (Pharmacia), digested with Not
I and cloned into the Not I and Eco RI sites of the
modified pT773 vector: Library is normalized. Library
was constructed by Bento Soares and M. Fatima Bonaldo."
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BB664509.1 GI:16498263
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 538)
Marira, M., Hillier, L., Allen, M., Bowles, M., Dietrich, N., Dubuque, T., Gelsel, S., Kucaba, T., Lacy, M., Le, M., Martin, J., Moris, M., Schellenberg, K., Steptoe, M., Tan, F., Underwood, K., Moore, B., Theising, B., Wylle, T., Lennon, G., Soares, B., Wilson, R. and
                                                                                                                                                                                                                                                                                                                                                                                                 Unpublished (1996)
Contact: Marra M/Mouse EST Project
WashU-HHMI Mouse EST Project
WashU-HHMI Mouse EST Project
WashIngton University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fex: 314 286 1810
Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
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4.7%; Score 23; DB 9; Length 538;
Best Local Similarity 100.0%; Pred. No. 0.8;
Matches 23; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Seq primer: -28ml3 rev2 ET from Amersham High quality sequence stop: 326. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                    Waterston, R.
The WashU-HHMI Mouse EST Project
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BB664509/c
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                                                                                                                                                                                                       Mus musculus

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

I (bases 1 to 509)

Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T.,

Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M.,

Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B.,

Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and

Waterston,R.

The MashU-HMMI Mouse EST Project
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ud83d09.rl Soares_mammary_gland_NMLMG Mus musculus cDNA clone
IMAGE:1477457 5' similar to gb:U14332 Mus musculus interleukin 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL ; contact the
INAGE Consortium (info@image.llnl.gov) for further information.
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Contact: Marra M/Mouse EST Project
WashU-HHMI Mouse EST Project
WashIngton University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
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Seg primer: -28ml3 rev2 Er from Amersham
High quality sequence stop: 361.
Location/Qualifiers
1. 509
/organism="Mus musculus"
/strain="C57BL/67"
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/clone="IMAGE:1399363"
/clone="IMAGE:1399363"
/clone=lib="Soares_mammary_gland_NbMMG"
/sex="male"
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/dev_stage="4 weeks"
/lab_host="DH108"
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Gaps

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ISM Muss muscalus.

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

CE 1 (bases 1 to 826)

I (bases 1 to 826)

NIH MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Groublished (1999)

Contect: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Jeffrey Green M.D.

CONT Library Preparation: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://inage.llnl.gov

Plate: LLAMI1877 row; j column: 07

High quality sequence scop: 826.
                                                                  BI685688 826 bp mRNA linear EST 18-SEP-2001
603309529F1 NCI_CGAP_Mam6 Mus musculus cDNA clone IMAGE:5345382 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /crain=wearners muscutuss
/db_xref="taxon:10090"
/clone="InAGE:5345882"
/sex="female, virgln"
/tissue_type="infiltrating ductal carcinoma"
/lab_host="5 months"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .826 /organism="Mus musculus"
                                                                                                                                                             BI685688.1 GI:15648316
                                                                                                               mRNA sequence.
BI685688
                                                                                                                                                                                                                house mouse.
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                                                                                                                                                                               Fax: 81-43-50-1216

Email: genome-resegsc.riken.go.jp,
URL:http://genome.gsc.riken.go.jp,
Carlinel.p., Shibata,Y., Hayatsu,N., Sugahara,Y., Shibata,K., Itoh
'M., Konno,H., Okazaki,Y., Hayatsu,N., and Hayashizaki,Y.
Normalization and subtraction of cap-trapper-selected connas to
prepare full-ingth cDNA libraries for rapid discovery of new
genes. Genome Res. 10 (10), 1617-1630 (2000)
Wagia,K., Fujiwake,S., Inoue,K., Togawa,Y., Tawa,M., Ohara,E.,
Watahiki,M., Yoneda,Y., Ishikawa,T., Ozawa,K., Tanaka,T., Matsuura
'S., Kawai,J., Okazaki,Y., Muramatsu,M., Inoue,Y., Kira,A. and
Hayashizaki,Y.
RIKBN integrated sequence analysis (RISA) system--384-format
sequencing pipeline with 384 multicapillary sequencer. Genome Res. .

10 (11), 1757-1771 (2000)
Konno,H., Fukumishi,Y., Shibata,K., Itoh,M., Carninci,P., Sugahara
'Y. and Hayashizaki,Y.
Computer-based methods for the mouse full-length cDNA
encyclopedia: real-time sequence clustering for construction of a
nonredundant cDNA library. Genome Res. . 11 (2), 281-289 (2001)
'K., Fukuda,S., Hara,A., Saito,T., Kiyosawa,H., Yamanaka,I., Aizawa
Hayashizaki,Y.
Computational Analysis of Full-Length Mouse cDNAS Compared with
Human Genome Sequences. Mamm. Genome. 12, 673-677 (2001)
Please visit our web site (http://genome.gsc.riken.go.jp) for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: Yoshihidé Hayashizaki
Laboratory for Genome Exploration Research Group, RIKEN Genomic
Sciences Center(GSC), Yokohama Institute
The Institute of Physical and Chemical Research (RIKEN)
17-22 Suebhiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan
Tel: 81-45-503-922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Mus musculus"
/db_xref="taxon:10090"
/clone="E030042P04"
/clone="EN3EN full-length enriched, 0 day neonate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.5%; Score 22; DB 9; Length 652;
100.0%; Pred. No. 2.6;
live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /tissue_type="lung"
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/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
  Unpublished (2001)
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Best Local Similarity 100.0
Matches 22; Conservative
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Sterky, F., Regan, S., Karlsson, J., Hertzberg, M., Rohde, A., Holmberg, A., Amini, B., Bhalerao, R., Larsson, M., Villarroel, R., Van Montagu, M., Sandberg, G., Olsson, O., Teerl, T.T., Boerjan, W., Gustafsson, P., Uhlen, M., Sundberg, B. and Lundeberg, J.
/note="Organ: mammary; Vector: pCMV-SPORT6; Site_1: SalI; Site_2: NotI: Cloned unidirectionally. Primer: Oligo dT. Library constructed by Life Technologies. Investigator providing samples: Jeffrey Green, M.D., NIH"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Populus tremula x Populus tremuloides.
Populus tremula x Populus tremuloides
Populus tremula x Populus tremuloides
Eukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta,
Spermatophyta, Magnollophyta, eudicotyledons, core eudicots;
Rosidae, eurosids I; Malpighiales; Salicaceae; Populus.
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100.08; Pre-
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Totoki, Y., Hatanabe, H. and Sakaki, Y.
Totoki, Y., Watanabe, H. and Sakaki, Y.
Direct Submission
Submitted (02-AUG-2001) Asao Fuliyama, The Institute of Physical
and Chemical Research (RIKEN), Genomic Sciences Center (GSC);
1-7-22 Suehirro-chou, Tsurumi-Ku, Yokohama, Ranagawa 230-0045, Japan
(E-mail:chimpeseggsc.riken.go.jp, URE.http://hgp.gsc.riken.go.jp/,
Tel:81-45-503-9111, Fax:81-45-503-9170)
Clones are derived from the chimpanzee BAC library PTB This BAC end
was generated during the R&D process and may have higher chance of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GSS; GSS (genome survey sequence).
Pan troglodytes male lymphoblast DNA, clone_lib:PTB Chimpanzee Male
BAC Library clone:PTB-101G10.R.
Pan troglodytes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="Vector: PBluescript SK; Site_1: SalI; Site_2: NotI; Cambial region tissues, including developing xylem, the meristematic cambial zone and the developing and mature phloem, was harvested from 1.5 m actively growing trees. CDNA was prepared and cloned into lambda gt22a. DNA was isolated and subcloned into pBluescript SK using SalI and NotI restriction enzymes."
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Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Pan.
  Gene discovery in the wood-forming tissues of poplar: Analysis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                    /organism="Populus tremula x Populus tremuloides"
/db_xref="taxon:47664"
/clone_lib="Hybrid aspen plasmid library"
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BAC end sequences of Library PTB
Unpublished
                      5,692 expressed sequence tags
Proc. Natl. Acad. Sci. U.S.A. 95 (22), 13330-13335 (1998)
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                                                                                                                                                                                                                                                                                                                                                                                                                                               /tissue_type="Cambial region" /dev_stage="1.5 m actively growing tree" /lab_host="E.coli"
                                                                                                         Department of Biotechnology
Royal Institute of Technology (KTH)
Tel: +46 B 9287
Fax: +46 B 24 54 52
Email: fredrik@blochem.kth.se
                                                                                                                                                                                                                                                                               BACKWARD: GCTTCCGGCTCGTATGTTGTGTG
Seq primer: CGTTGTAAAACGACGGCCAG
High quality sequence stop: 560.
Location/Qualiflers
1. .560
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/note-"Organ: mammary gland; Vector: pT7T3D-Pac (Pharmacla ) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; 1st strand cDNA was primed with a Not I - oligo(dT) primer [5'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AIS96704 690 bp mRNA linear EST 21-APR-1999 vk38h11.yl Soares_mammary_gland_NbMMG Mus musculus cDNA clone IMAGE:948933 5' similar to gb:U14332 Mus musculus interleukin 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This read is a RESEQUENCE of a previously sequenced mouse clone This read has been verified (found to hit its original self in the correct orientation)
Seq primer: -40RP from Gibco
High quality sequence stop: 466.
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NCI-GGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (GGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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0
                                                                                                                                                                                                                                              Chimpanzee Male BAC Library"
g 160 t 2 others
                                                                                                                                                                                                                                                                                                                                                       Length 687;
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8.3;
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                                                                                                                                                                                                                      /cell_type="lymphoblast"
/clone_lib="PTB Chimpanze
115 c 121 g 160
                                                                                                       Location/Qualiflers
                                          : pkS145
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Sequencing: Ml3Rev
LIBRARY
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Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                  21; Conservative
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                                             Vector
R.Site 1
R.Site 2
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/db_xref="texon:5807"
/dlone_lib="CplOWAgDNA1"
/lab_host="E. coli XL2 Blue MRF'"
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parvum (104A isolate) genomic DNA was hydrodynamically
sheared to produce fragments having a tight size
distribution between 2-4 kb by Dr. Yvonne Thorstenson of
the Stanford DNA Sequencing and Technology Center
(http://sequence-www.stanford.edu/group/techdev/shear.htm). The randomly sheared gDNA was chromatographed on
Sephacryl S-400 to remove any small fragments and DNA
eluting in the void volume was subcloned into an ECOR
V-digested, alkaline phosphatase-treated pBlueScript II
(SK-) vector and transformed into E. coli strain XL2 Blue
MRF'. Recombinant clones from the first plating of the
library were selected for sequence analysis using T3 and
T7 primers."
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Box 0811, 2an Francisco, CA 94143-0811, USA
Tel: 415 206 8846
Fax: 415 206 3353
Email: malaria@itsa.ucsf.edu
Seq primer: MJ3(-21) forward
Class: shotgun.
                                                                                                                                                                                                                                                                                                                                                                                            AQ935740 742 bp DNA linear GSS 12-MAY-2000 CpG2625A CpIOWAgDNAl Cryptosporidium parvum genomic, DNA sequence. AQ935740
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the Not I and Eco RI sites of the modified pT7T3 vector. RNA provided by Dr. Minoru Ko, Wayne State Univ. Library constructed and normalized by Bento Soares and M.Fatima
                                                                                                                                                                                                                 Gaps
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Depts. of Medicine & Pharmaceutical Chemistry
San Francisco General Hospital-University of California, San
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryotan Alem Full Apicomplexa; Coccidia; Eimeriida; Cryptosporidiidae; Cryptosporidium.

1 (bases 1 to 742)
Strong, W.B. and Nelson, R.G.
Preliminary profile of the Cryptosporidium parvum genome: a expressed sequence tag and genome survey sequence analysis 20183851
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                                                                                                                                                                 Score 21; DB 9; Length 690;
Pred. No. 8.3;
                                                                                     7 others
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100.0%; Pred
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                                                                                177 c
                                                             Bonaldo."
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Eukaryotta; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Manmaila; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 204)

Nammaila; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 204)

N. Alzawa, M., Akahira, S., Akiyama, J., Arakawa, T., Carninci H. P., Endo, T., Fukuda, S., Fukunishi, Y., Hara, A., Hayatsu, N., Hirozane, T., Horli, F., Ishi, Y., Lishi, Y., Hara, A., Hayatsu, N., Kadota, K., Kagawa, I., Kai, C., Kawai, J., Kikuchi, N., Matsuyama, T., Maki, K., Mizuno, Y., Raya, S., Kurihara, C., Kusakabe, M., Matsuyama, T., Mati, R., Mizuno, Y., Nakamura, M., Oda, H., Okaa, K., Shibata, Y., Ono, T., Owa, C., Saito, H., Sakai, C., Sato, K., Shibata, Y., Suzuki, H., Tagawa, A., Takahashi, F., Tominaga, N., Toya, T., Tsunoda, Y., Watchiki, A., Yokota, T., Yoshida, K., Yano, R., Yasunishi, A., Yokota, T., Yoshida, K., Yoshihod Hayashizaki, Y.

Unpublished (2000)

Contact: Yoshihide Hayashizaki, Y.

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Fax: 81-45-503-9222

Fax: 81-45-503-9226

Fmail: Genome-referenced to the Mission of the
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Email: genome-resegsc.riken.go.jp,
URL:http://genome.gsc.riken.go.jp/
Carninci.p-, Nishilyama.Y.; Westover,A., Itoh,M., Nagaoka,S., Sasaki,N., Okazaki,Y.; Muramatsu,M. and Hayashizaki,Y.
Thermostabilization and themmoativation of thermolabile enzymes by trehalose and its application for the synthesis of full length CDNA. Proc. Natl. Acad. Sci. U.S.A. 95 (2), 520-524 (1998)
Itoh,M., Kitsunai,T., Akigama,J., Shibata,K., Izawa,M., Rawai,J., Tomaru,Y.; Carninci,P., Shibata,Y., Ozawa,Y., Muramatsu,M., Okazaki,Y. and Hayashizaki,Y.
Automated filtration-based high-throughput plasmid preparation system Genome Res. 9 (5), 463-470 (1999)
System Genome Res. 9 (5), 463-470 (1999)
High-efficiency full-length CDNA cloning. Methods Enzymol. 303, place. Mich. Acc., 
                                                                                                                                                                                                                                                                                                                                                                                                           BB467257 RIKEN full-length enriched, 12 days embryo eyeball Mus musculus cDNA clone D230013016 3' similar to S59342 nuclear pore Complex glycoprotein p62, mRNA sequence.
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eyeball"
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Location/Qualifiers
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/lab_host="DH10B"
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435 AGAATTTTGCAGAGTTTTGT 455
                                                                   514 AGAATTTTGCAGAGTTTTGT 534
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0; Indels

4.3%; Score 21; DB 12; Length 742; 100.0%; Pred. No. 8.3;

Ouery Match
4.3%; Score 21; DB
Best Local Similarity 100.0%; Pred. No. 8.3
Matches 21; Conservative 0; Mismatches

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Email: genome-rese@gc.riken.go.jp,
URL:http://genome-rese@gc.riken.go.jp,
URL:http://genome-rese@gc.riken.go.jp/
URL:http://genome-rese@gc.riken.go.jp/
URL:http://genome-rese@gc.riken.go.jp/
URL:http://genome-rese@gc.riken.go.jp/
URL:http://genome-gsc.riken.go.jp/
N., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y.
Thermostabilization and thermoactivation of thermolabile enzymes by trehalose and its application for the synthesis of full length cDNA. Proc. Natl. Acad. Sci. U.S.A. 95 (2), 520-524 (1998)
Itoh,M., Kitsunai,Y., Akiyama,J., Shibata,K., Izawa,M., Kawai,J., Tomaru,Y., Carninci,P., Shibata,Y., Ozawa,Y., Muramatsu,M., Okazaki,Y. and Hayashizaki,Y.
Automated filtration-based high-throughput plasmid preparation system Genome Res. 9 (5), 463-470 (1999)
Carninci,P. and Hayashizaki,Y.
High-efficiency full-length cDNA cloning. Methods Enzymol. 303, 19-44 (1999)
contributed to prepare mouse tissues. Ist strand cDNA was parimed with a primer [5′ acdsGAGGAGGGGGCGACTCGAGTTTTTTTTTTTTTTVN 3′], cDNA was prepared by using trehalose thermo-activated reverse transcriptase and subsequently enriched for full-length by cap-trapper. Second strand cDNA was prepared with the primer adapter of sequence [5′ adapter of sequence [5′ adapter of sequence [5′ adapter of sequence [5′ adapter 10′ se
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4.1%; Score 20; DB 9; Length 204;
Best Local Similarity 100.0%; Pred. No. 29;
Matches 20; Conservative 0; Mismatches 0; Indels
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AI447397 253 bp mRNA 11near EST 09-MAR-1999
mg63f10.x1 Soares_thymus_2NbMT Mus musculus cDNA clone IMAGE:583435
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NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                         /db_xref="taxon:10090"
/clone="A530014K14"
/clone_lib="RIKEN full-length enriched, adult male aorta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tumor Gene Index
Inpublished (1997)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (infolimage.llnl.gov) for futther information.
This clone was previously sequenced on the 5' end only, this new
data is from the 3' end
High quality sequence stop: 247.
visit our web site (http://genome.rtc.riken.go.jp) for
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/dev_stage="adult"
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                                                                                                      Danil: genome_resigsc.riken.go.jp,
URL:http://genome.gsc.riken.go.jp/
Carninci.P., Nishlyama.Y., Westover.A., Itoh,M., Nagaoka,S., Sasaki
A., Okazaki.Y., Muramatsu.M. and Hayashizaki.Y.
Thermostabilization and thermoactivation of thermolabile enzymes by
trehalose and its application for the synthesis of full length
CIPA. Proc. Natl. Acad. Sci. U.S.A. 95 (2), 520-524 (1998)
Itoh,M., Kitsunal.T., Akiyama.J., Shibata,K., Izawa,M., Rawai,J.,
Tomaru.Y., Carninci,P., Shibata,Y., Ozawa,Y., Muramatsu,M., Okazaki,
Y. and Hayashizaki,Y.
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The Institute of Physical and Chemical Research (RIKEN)
1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan Tel: 81-45-503-9216
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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/clone_lib="Soares_thymus_2NbMT"
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100.0%; Pred. No.
tive 0; Mismatcl
                                       /tissue_type="Thymus"
                                                               /dev_stage="4 weeks"
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Konno, H., Alzawa, K., Akahira, S., Akiyama, J., Arakawa, T., Carninci, P., Endo, T., Fukuda, S., Fukunishi, Y., Hara, A., Hayatsu, N., Hirozane, T., Hori, F., Ishii, Y., Ishikwa, J., Ishikwa, T., Itoh, M., Izawa, M., Kadota, K., Kagawa, I., Kai, C., Kawai, J., Kikuchi, N., Kiyosawa, H., Kolima, Y., Kondo, S., Koya, S., Kurihara, C., Kusakabe, M., Matsuyama, T., Miki, R., Mizuno, Y., Nakamura, M., Oda, H., Okazaki, Y., Ono, T., Owa, C., Saito, H., Sakai, C., Sato, K., Shibata, K., Shigemoto, Y., Shinaya, A., Shiraki, T., Soqabe, Y., Sugahara, Y., Suzuki, H., Suzuki, H., Tagawa, A., Takahashi, F., Tominaga, N., Toya, T., Tsunoda, Y., Watahiki, A., Watanabe, S., Yamamura, T., Yamanaka, I., Yano, R., Yasunishi, A., Yokota, T., Yoshida, K., Yoshino, Y., Yano, R., Yasunishi, A., Yokota, T., Yoshida, K., Yoshino, Y., Yano, R., Yasunishi, A., Yokota, T., Yoshida, K., Yoshino, Y., Yano, R., Yasunishi, A., Yokota, T., Yoshida, K., Yoshino, Y., Yano, Y., Yashino, R., Yashino, Y., Yashino, Yashin
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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Automated filtration-based high-throughput plasmid preparation system. Genome Res. 9 (5), 463-470 (1999)
Carninci,P. and Hayashizaki,Y.
High-efficiency full-length cDNA cloning. Methods Enzymol. 303, 19-44 (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="Site_1: Sal1; Site_2: BamHI; cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken
                                                                                                                                                                                                   Please visit our web site (http://genome.rtc.riken.go.jp) for further details.
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/clone="9930003p08"
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/dev_stage="adult"
/lab_host="DH108"
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URL:http://genome.gac.riken.go.jp,
URL:http://genome.gac.riken.go.jp,
Carninci,P., Nishiyama,Y., Westover,A., Itoh,M., Nagaoka,S., Sasaki
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Tomaru,Y., Carninci,P., Shibata,Y., Ozawa,Y., Muramatsu,M., Okazaki
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Carninci,P. and Hayashizaki,Y.
High-efficiency full-length cDNA cloning. Methods Enzymol. 303,
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KIKEN Mouse ESTS (Konno, H., et al.)
Unpublished (2000)
Contact: Yoshihide Hayashizaki
Caboratory for Genome Exploration Research Group, RIKEN Genomic
Sciences Center(GSC), Yokohama Institute
The Institute of Physical and Chemical Research (RIKEN)
1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan
Fax: 81-45-503-9216
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Please visit our web site (http://genome.rtc.riken.go.jp) for
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/dev_stage="10 days neonate"
/lab_host="DH10B"
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/db_xref="taxon:10090"
/clone="4732457Ll3"
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URL:http://genome-resegac.riken.go.jp,
Carninci.p. Nishiyama.Y. Westover,A., Itoh,M., Nagaoka,S., Sasaki,
N., Okazaki,Y., Muramatsu,M. and Haysshizaki,Y.
Thermostabilization and thermoactivation of thermolabile enzymes by
trehalose and its application for the synthesis of full length
cDNA. Proc. Natl. Acad. Sci. U.S.A. 95 (2), 520-524 (1998)
Itoh,M., Kitsunai,T., Akiyama,J., Shibata,K., Izawa,M., Kawai,J.,
Y. and Haysshizaki,Y.
Y. and Haysshizaki,Y.
Automated filtration-based high-throughput plasmid preparation
system. Genome Res. 9 (5), 463-470 (1999)
Carninci,P. and Haysshizaki,Y.
Carninci,P. and Haysshizaki,Y.
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BB292315 RIKEN full-length enriched, 9.5 days embryo parthenogenote Mus musculus cDNA clone B130010F22 3' similar to S59342 nuclear bpore complex glycoprotein p62, mRNA sequence.
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             3'). cDNA was cloned into the XhoI and BamHI sites.
Vector: a modified pBluescript KS(+) after bulk excision
from Lambda FLC I" 98 t
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                                                                                                                                                 0; Indels
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Musmmalia; Eutheria; Rodentia; Sciurognathi; Muridae; Musinae; Mus. 1 (bases 1 to 295)

Konno, H., Alzawa, K., Akahira, S., Akiyama, J., Arakawa, T., Carninci, F., Erkuda, S., Fukudishi, Y., Hara, A., Hayatsu, N., Hirozane, T., Hori, F., Ishii, Y., Kai, C., Kawai, J., Kikuchi, N., Izawa, M., Kadota, K., Kagawa, I., Kai, C., Kawai, J., Kikuchi, N., Kiyoswa, H., Kojima, Y., Kondo, S., Koya, S., Kurihara, C., Kusakabe, M. Matsuyama, T., Miki, R., Mizuno, Y., Nawanura, M., Oda, H., Okazaki, Y., Shigemoto, Y., Shinagawa, A., Shiraki, T., Sogabe, Y., Sugahara, Y., Suzuki, H., Suzuki, H., Tagawa, A., Takahashi, F., Tominaga, N., Toya, T., Tsunoda, Y., Watahaki, A., Takahashi, P., Tominaga, N., Toya, Y., Yano, R., Yasunishi, A., Yokota, T., Yoshida, K., Yoshiki, A., Yoshino, HIKEM Mouse ESTS (Konno, H., et al.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    prepared by using trehalose thermo-activated reverse transcriptase and subsequently enriched for full-length by cap-trapper. cDNA went through one round of subtraction to Rot = 229.0 Second strand cDNA was prepared with the primer adapter of sequence [5' GAGAGAGAGATTAATTAAATTAAATCCCCCCCCCCC 3']. cDNA
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                                                                                                                                                                                                                    prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken pointsubted to prepare mouse tissues. 1st strand cDNA was GAGAGAGAGAGCACTTTTTTTTTTTTVN 3'], cDNA was
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URL:http://genome.gsc.riken.go.jp/
Carninci,P., Nishiyama,Y., Westover,A., Itoh,M., Nagaoka,S., Sasaki
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The Institute of Physical and Chemical Research (RIKEN)
The Institute of Physical and Chemical Research (RIKEN)
T-22 Submiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan
Fax: 81-45-503-9216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BB135090 RIKEN full-length enriched, adult male bone Mus musculus CDNA clone 9830122A02 3' similar to S59342 nuclear pore complex
/clone_lib="RIKEN full-length enriched, 9.5 days embryo
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Laboratory for Genome Exploration Research Group, RIKEN Genomic
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100.0%; Pred. No. 29;
Live 0; Mismatches 0; Indels
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                                                                      /tissue_type="parthenogenote"
/dev_stige="9.5 days embryo"
/lab_host="bH108"
/note="§ite_1: Sal1; Site_2: F
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BB135090
BB135090.1 GI:8790027
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Itoh, M., Kitsunal, T., Akiyama, J., Shibata, K., Izawa, M., Kawai, J., Yomaru, Y., Carninci, P., Shibata, Y., Ozawa, Y., Muramatsu, M., Okazaki, Y. and Hayashizaki, Y.

Automated filtration-based high-throughput plasmid preparation system. Genome Res. 9 (5), 463-470 (1999).

Carninci, P. and Hayashizaki, Y.

High-efficiency full-length cDNA cloning. Methods Enzymol. 303, 19-44 (1999).
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
I (bases 1 to 295)
Konno, H., Aizawa, K., Akahira, S., Akiyama, J., Arakawa, T., Carninci, P., Endo, T., Fukuda, S., Fukunishi, Y., Hara, A., Hayatsu, N.,
Hirozane, T., Horl, F., Ishii, Y., Ishikawa, J., Ishikawa, T., Itoh, M.,
Kiyosawa, H., Kadota, K., Kagawa, I., Rai, C., Kawai, J., Kikuchi, N.,
Kiyosawa, H., Kojima, Y., Kondo, S., Koya, S., Kurihara, C., Kusakabe, M.
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/ue_scale_andual_
/note="Site_1: SalI; Site_2: BamHI; cDNA library was
prepared and sequenced in Mouse Genome Encyclopedia
Project of Genome Exploration Research Group in Riken
Genomic Sciences Center and Genome Science Laboratory in
RIKEN. Division of Experimental Animal Research in Riken
contributed to prepare mouse tissues. 1st strand cDNA was
primed with a primer [5'
GAGAGAGAAGGATCCAAGAGCTCTTTTTTTTTTTTYTTY] 3'), CDNA was
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BB157192.1 GI:8813122
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1. .295
/organism="Mus musculus"
/db_xref="taxon:10090"
/clone="9830122Aq2"
/clone_19b="RIKEN full-length enriched, adult male bone"
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4.1%; Score 20; DB 9; Length 295;
Best Local Similarity 100.0%; Pred. No. 29;
Matches 20; Conservative 0; Mismatches 0; Indels
Okazaki, Y., Muramatsu, M. and Hayashizaki, Y.
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/dev_stage="adult"
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watsuyama,T., Miki,R., Mizuno,Y., Nakamura,M., Oda,H., Okazaki,Y.
, Ono,T., Owa,C., Saito,H., Sakai,C., Sato,K., Shibata,K., Shibata,
, Y., Shigamoto,Y., Shinagawa,A., Shiraki,T., Sogabe,Y., Sugabara,Y.
, Suzuki,H., Suzuki,H., Tagawa,A., Takahashi,F., Tominaga,N., Toya
,T., Tsunoda,Y., Watahiki,A., Watanabe,S., Yamamura,T., Yamanaka,I.
, Yano,R., Yasunishi,A., Yokota,T., Yoshida,K., Yoshiki,A., Yoshino
,M., Muramatsu,M. and Hayashizaki,Y.
RIKEN Mouse ESTS (Konno,H., et al.)

Dupublished (2000)

Contact: Yoshihide Hayashizaki,Y.
RIKEN Mouse ESTS (Konno,H., et al.)

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Fax: 81-45-503-9225
Fax: 81-45-503-9226
Fax: 81-45-503-9216
Email: genome-resegsc.riken.go.jp,
URL:http://genome.gsc.riken.go.jp,
URL:http://genom
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/lab_host="DH10B"
/note="Site_1: Sal1; Site_2: BamH1; cDNA llbrary was
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/clone="A130035D04"
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Mus.
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Hiramoto K., Hiraoka T., Hirozane T., Imotani K., Ishii Y., Ito M.,
Kawai J., Kojima Y., Konon H., Kouda M., Matsuyama T., Nakamura M.,
Nishi K., Nomura K., Numasaki R., Okazaki Y., Okido T., Saito R., Sakai C.,
Sakai K., Sakazume N., Sasaki D., Sato K., Shibata K., Shinagawa A.,
Shiraki T., Sogabe Y., Suzuki H., Taqawa A., Takahashi F.,
Takaku-Akahira S., Tanaka T., Tomaru A., Toya T., Watahiki A.,
"RIKEN Encyclopedia of Mouse Full-length CDNAs";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (28-SEP-2001) to the EMBL/GenBank/DDBJ databases.
Yoshihide Hayashizaki, The Institute of Physical and Chemical Research
RIKEN). Laboratory for Genome Exploration Research Group, RIKEN Gemomic
Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho,
Tsurumi-ku, Yokohama, Kanaqawa 230-0045, Japan
(E-mail:genome-res@gsc.riken.go.jp, URL:http://genome.gsc.riken.go.jp/,
Tel:81-45-503-9222, Fax:81-45-503-9216)
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                                                                                                                                                                                          RIKEN full-length
                                                                                                                                                                                   Mus musculus 9.5 days embryo parthenogenote cDNA, RIKEN full enriched library, clone:Bl30060L02, 3' end partial sequence.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Eutherla; Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                                 09-OCT-2001 (Rel. 69, Created)
09-OCT-2001 (Rel. 69, Last updated, Version 1)
                                standard; RNA; EST; 307 BP
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Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla: Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 347)

S Ronno, H., Alzawa, K., Akahira, S., Akiyama, J., Arakawa, T., Carninci, P., Endo, T., Fukuda, S., Fukunishi, Y., Hara, A., Hayatsu, N., Hrozane, T., Hori, F., Ishi, Y., Ishikawa, J., Ishikawa, T., Itoh, M., Izawa, M., Kadota, K., Kagawa, I., Kai, C., Kawai, J., Kikuchi, N., Kiyoswa, H., Kojima, Y., Kondo, S., Koya, S., Kurihara, C., Kusakabe, M., Matsuyama, T., Miki, F., Mizuno, Y., Nakamura, W., Odo, T., Owa, C., Saito, H., Sakai, C., Sato, K., Shibata, K., Shibata, Y., Shinagawa, A., Shiraki, T., Sogabe, Y., Sugahara, Y., Shigemoto, Y., Watchiki, A., Tagawa, A., Takhashi, F., Tominaga, N., Toya, T., Tsunoda, Y., Watchiki, A., Watchashi, F., Yamamura, T., Yamamaka, I., Yano, R., Yasunishi, A., Yokota, T., Yoshida, K., Yoshino, RIKEM Mouse ESTS (Konno, H., et al.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone_lib="RIKEN full-length enriched mouse cDNA library"
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The Institute of Physical and Chemical Research (RIKEN)
1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan Tel: 81-45-503-9222
Muramatsu M., Inoue Y., Kira A., Hayashizaki Y.; "RIKBN integrated sequence analysis (RISA) system-384-format sequencing pipeline with 384 multicapillary sequencer"; Genome Res. 10:1757-1771(2000).
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CDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Rike Genomic Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to prepare mouse tissues.
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tive 0; Mismatch
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UCIDET_GSSS: RFULII-20124.TF
CONTECT: Mark Adams
Contact: Mark Adams
Contact: Mark Adams
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850, USA
Tel: 301 838 0200
Fax: 301 838 0200
Email: mdadams@tigr.org
Clones are derived from the human BAC library RPCI-11. For BAC
library availability, please contact Pieter de Jong
(pieter@dejong.med.buffalo.edu). Clones may be purchased from
BACPAC Resources (http://bacpac.med.buffalo.edu/ordering) or from
Research Genetics (http://bacpac.med.buffalo.edu/ordering) or from
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B87338 1 GI:2928470
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Eukaryota, Mactazoa; Chordata; Craniata; Vertebrata; Euteleostom1;
Eukaryota; Mactazoa; Chordates; Catarrhini, Hominidae; Homo.

1 (bases 1 to 370)
Adams, M.D., Rounsley, S.D., Zhao, S., Field, C.E., Bass, S., Linher, K., Golden, K., Berry, K., Granger, D., Suh, E., Wible, C., de Jong, P. and Venter, J.C.
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                                                                                                                                                                                                      Chinese National Human Genome Center at Shanghai Shanghai 351 Guo Shoujing Road, Zhangjiang Hi-Tech Park, Pudong, Shanghai 201203, P. R. China Tel: 86-21-50801919(ex.45) Fax: 86-21-50801922 Email: hangdehggc.sh.cn Finis Clone is available at CHGC in Shanghai.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /tissue_type="corresponding non cancerous liver tissue"
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                        URL:http://genome.gsc.riken.go.jp/
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High-efficiency full-length cDNA cloning. Methods Enzymol. 303,
19-44 (1999)
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//dev_stage="16 days neonate"
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Xu,X., Huang,J., Xu,Z., Qian,B., Zhu,Z., Yan,Q., Cai,T., Zhang,X.,
Xiao,H., Qu,J., Liu,F., Huang,Q., Cheng,Z., Li,N., Du,J., Hu,W.,
Shen,K., Lu,G., Yeu,G., Zhong,M., Xu,S., Gu,W., Huang,W., Zhao,X.,
Hu,G., Gu,J., Chen,Z. and Han,Z.
Insight into hepatocellular carcinogenesis at transcriptome level
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                                                                                                                                                                                                                                                                A simian species of IL-15 (aIL-15) was purified and its AA sequence and cDNA sequence analysed (see AAR83309, AAR83436, AAT00524, AAT00525). Both the simian and the human ORFs encode a precursor polypeptide (AAR83436, AAR8438). The precursor polypeptide (AAR83436, AAR8438). The precursor polypeptide (AAR83436, AAR8438). The precursor polypeptide and a factor sequence and a sequence encoding mature simian or human IL-15 polypeptides are disclosed in AAR83309 & AAR83310 respectively. The invention also comprises other mammalian IL-15, including human IL-15, that hybridise to probes defined by AAR83438. A plasmid contg. a recombinant clone of human IL-15 cDNA was deposited with ATCC on Feb. 19 1993 under ATCC 69245. The deposit was named 141-HETF. AAR83315 is a mammalian mature IL-15 polypeptide. It is a generic sequence which encompasses both AAR83309 (simian) and AAR83310 (human) IL-15 mature polypeptides.
                                                                                                                                                                            Isolated DNA encoding polypeptide with mammalian IL-15 activity - which stimulates proliferation and differentiation of T cells, used for treating carcinoma(s), melanomas, etc. and viral infections
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACGGAAAGTGATGTTCAC 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCCAGTTGCAAAGTAACAGCAATGAAGTGCTTTCTCTTGGAGTTACAAGTTATTTCACTT 300
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 489 BP; 159 A; 79 C; 95 G; 156 T; 0 other;
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                                                                                      Fung V, Grabstein KH;
                                                                                                                                                                                                                                          Claim 36; Page 28-29; 48pp; English
                             94WO-US03793.
                                                                                      Anderson DM, Eisenman JR,
                                                         (IMMV ) IMMUNEX CORP.
                                                                                                                                  WPI; 1995-373556/48.
P-PSDB; AAR83438.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTTCTTGA 489
                             06-APR-1994;
                                                                                                      Rauch C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
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New epithelium derived T cell factor - induces proliferation of T and B cells, stimulates destruction of tumour and virus-infected cells and protects against toxicity, partic. for treating intestinal disease and HIV infection
121 gcagggcttcctaaaacagaagccaactgggtgaatgtaataagtgattgaaaaaaatt 180
                                                                      GAGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCCTAGCAAACAAC
                                                                                                                                                                     AGTTTGTCTTCTAATGGGAATGTAACAGAATCTGGATGCAAAGAATGTGAGGAACTGGAG
                                                                                                                                                                                  181 GAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACGGAAAGTGATGTTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                    sETF; African green monkey; CV1/EBNA cell; T-cell;
lymphocyte; proliferation; differentiation; gastrointestinal;
HIV infection; human immunodeficiency virus; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Grabstein KH;
                                                                                                                                                                                                                                                                                                                                                                                                                              Simian epithelium derived T cell factor cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Fung V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                         BP.
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/product= sETF
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                                                                                                                                                                                                                                                                                                                                                         AAT49455 standard; cDNA; 489
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93US-0031399.
94US-0233606.
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                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
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145..486
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cercopithecus aethiops
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                                                                                                                                                                                                                                                                                             489
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08-MAR-1993;
22-APR-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New purified interleukin-15 - which induces T cell proliferation and differentiation, used for the treatment of tumours and viral
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A sIL-15 probe was prepared from isolated simian interleukin-15 cDNA and used to screen a cDNA library generated from the IMTLH cell line derived from human bone marrow stromal cells. Clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                            Interleukin-15; IL-15; hIL-15; T-cell growth factor;
antitumor; virucide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 489 BP; 159 A; 79 C; 95 G; 156 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 489; DB 16;
100.0%; Pred. No. 2.4e-229;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fung V, Grabstein KH;
                                                                                                                                                                                                                                                                           precursor
                                                                                                                                                                                                                                                                                                           145.486
/*tag= c
/product= mature IL-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 28-29; 47pp; English.
                                                                                                                                                                                                                                      Location/Qualifiers
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                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    I41.hETF encoded human IL-15.
                                                                            AAQ84584 standard; cDNA; 489
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                                                                                                                                                     Human IL-15 clone I41.hETF
                                                                                                                              (first entry)
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P-PSDB; AAR66927.
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489; Conserv
       481 acttcttga 489
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                                                                                                                                                                                                                 Homo sapiens
                                                                                                                              04-SEP-1995
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                                                                                                                                                                                                                                                                                       sig_peptide
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Best Local S:
Matches 489
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                                                                                                      AAQ84584;
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                                                                                                                                                                                                                                        Key
                                                                      AAQ84584
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Homo sapiens.
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epithelial cell; differentiation; T-lymphocyte; African green monkey;
primer; PCR; polymerase chain reaction; amplification; probe; ss.
                                                                                                                                                                                                                                                       61 CTAAACAGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGT 120
                                                                                                                                                                                                                                                                  GCAGGCCTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATT 180
                                                                                                                                                                                                                                                                                                        GAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACGGAAAGTGATGTTCAC 240
                                                                                                                                                                                                                                                                                                                                              CCCAGTIGCAAAGIAACAGCAAIGAAGIGCITICTCTIGGAGITACAAGITAITICACIT 300
                                                                                                                                                                                                                                                                                                                                                                                    GAGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCCTAGCAAACAAC 360
                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                      9
                                                                                                                                                                                                                            primers were designed based on the sequence information. A 92 bp fragment was amplified from CV1/EBNA DNA and was used as a probe to screen a CV1/EBNA cDNA library for the full-length sETF coding sequence (1.e. the present sequence). Mature SETF induces proliferation and/or differentiation of precursor or mature T cells and is useful for promoting long-term in vitro culture of T-lymphocytes and T-cell lines. It is used for treating
                 The simian ETF (epithelium derived T cell factor) was isolated from African green monkey CV1/EBNA cell conditioned medium. The N-terminal sequence of the purified sETF was determined and then PCR
                                                                                                                                                                                                                 AGTTTGTCTTCTAATGGGAATGTAACAGAATCTGGATGCAAAGAATGTGAGGAACTGGAG
                                                                                                                                                                                                    ö
                                                                                                                    gastrointestinal diseases including peptic ulcer, colitis and malignancy and for treating HIV infection.
                                                                                                                                                                                DB 17; Length 489;
                                                                                                                                                                                                  Indels
                                                                                                                                               Sequence 489 BP; 159 A; 79 C; 95 G; 156 T; 0 other;
                                                                                                                                                                            100.0%; Score 489; DB 17;
100.0%; Pred. No. 2.4e-229;
Live 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human epithelium-derived T cell factor gene.
Claim 1; Fig 1; 35pp; English
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                                                                                                                                                                           Query Match
Best Local Similarity 100.
Matches 489; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTTCTTGA 489
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This is the nucleotide sequence encoding a human epithelium-derived the Corresp. After The gene was obtained using a 1.37 kb fragment of the corresp. Aftican green monkey gene (AAA12225) as a probe to screen a cDNA ilbrary constructed from RNA derived from the IMTLH cell line. This cell line is derived by stable transformation of a human bone marrow stromal cell culture with psylace. From a pool of about 1000 cDNA clones, one clone 14. InETF contained this sequence. ETF is a protein of proliferation and/or differentiation of precursor and/or mature T cells. The protein is therefore useful for promoting long term in vivo culture of T-lymphocytes and T-cell lines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                              New isolated simian and human epithellum-derived T-cell factors which stimulate the proliferation and/or differentiation of T-lymphocytes and T-cell lines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 489;
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                                                                                                                                                                                                                                                                                                                                                 Rauch
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 489; DB 17;
100.0%; Pred. No. 2.4e-229;
Live 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                           Elsenman J, Fung V, Grabstein K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 21; Column 23-24; 22pp; English.
Location/Qualiflers
                                                                                                                                                                                                              93US-0031399.
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                  1..144
/*tag= a
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Best Local Similarity
Matches 489; Conserv
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                                                                                                                                                                                                                                                       08-MAR-1993;
               sig_peptide
                                                                                                                        US5552303-A.
                                                                                                                                                                                                                                                                                                                                           Anderson D,
                                                          mat_peptide
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IL-15; interleukin-15; T-cell growth factor; proliferation; stimulate; muscle growth; differentiation; hypettrophy; treat; atrophy; wasting; skeletal; cardiac; muscle; congestive heart failure; diabetes-associated; glucose-intolerance; dyslipidaemia; rhabdomycosarcoma; dystrophy; ss.
This sequence encodes human interleukin-15 (IL-15) (see AAW01658), a known T-cell growth factor that can support proliferation of an IL-2-dependent cell line, CTLL-2. Compsns. contg. IL-15 to stimulate
                                             GAGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCCTAGCAAACAAC
                                                                                                                                    GAAAAAAATATTAAAAGAATTTTTGCAGAGTTTTTGTACATATTGTCCAAATGTTCATCAAC
                                                                             241 CCCAGTTGCAAAGTAACAGCAATGAAGTGCTTTCTCTTTGGAGTTACAAGTTATTCACTT
                                                                                                                                                                       AGTTTGTCTTCTAATGGGAATGTAACAGAATCTGGATGCAAAGAATGTGAGGAACTGGAG

    for treating, e.g.

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 interleukin 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            congestive heart failure, muscle wasting etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 12; 22pp; English.
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                                                                                                                                                                                                                                                                                                                                              BP.
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/product= IL-15
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Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A cDNA clone (AAT36635) codes for human interleukin-15 (IL-15) (AAR98527), a T-cell growth factor. Muteins of human IL-15 or simian IL-15 (see also AAR89526) are useful as antagonists of IL-15 and can be prepd. by PCR-mediated mutagenesis of the encoding sequences. Preferred muteins have amino acid substitutions at Asp56 and/or Gln156 of the IL-15 protein that prevent signal transduction. They are useful for treating graft-versus-host
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Antagonists of interleukin-15 - are used to treat patients having symptoms of graft-versus-host disease and for prolonging allo:graft survival
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                                                                                                                                                                                                                                                    antagonist; mutein; graft versus host disease;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tch 100.0%; Score 489; DB 17; al Similarity 100.0%; Pred. No. 2.4e-229; 489; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 disease and for prolonging allograft survival
                                                                                                                                                                                                                                                    Interleukin-15; antagonist; mutein;
allograft; T-cell growth factor; ss.
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muscle growth, differentiation or hypertrophy are claimed. The stimulation of muscle growth is useful for treating atrophy, or wasting, in particular, skeletal and cardiac muscle atrophy. The compens. further comprises a steroid, growth hormone and insulin-like growth factor. Congestive heart failure, muscle wasting and diabetes-associated glucose-intolerance or dyslipidaemia, rhabdomycosarcoma and muscular
                                                                                                                                      CTAAACAGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGT 120
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                                                                                                                                                                                                                                                                                          GAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACGGAAAGTGATGTTCAC
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                                                                                                                                                                                                                                                        GAGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCCTAGCAAACAAC
                                                                                             ;
0
                                                                                Length 489;
                                                                                              Indels
                                                          Sequence 489 BP; 159 A; 79 C; 95 G; 156 T; 0 other;
                                                                              Score 489; DB 18;
Pred. No. 2.4e-229;
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                                            dystrophy can all be treated by such compsns..
                                                                                             Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      T cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                       Human interleukin-15 coding sequence,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            cytokine; growth factor; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                             489; Conservative
                                                                                       Similarity
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                                                                               Query Match
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This sequence encodes human interleukin-15 (IL-15), which can be used in the vaccine of the invention. The vaccine composition comprises an immunogenic amount of a vaccine antigen (49) and an immunogenicity-augmenting amount of IL-15. The composition is useful for enhancing the immunogenicity of a vaccine. The cytokine IL-15 is a potent T and B cell growth factor. It causes proliferation and differentiation of these cells and augments T cell mediated immune responses. The vaccine composition can sufficiently elicit an immune response without being deleterious to the recipient, especially when using pathogenically deficient antigens. Some vaccines do not elicit a strong immune response and cannot provide sufficient protection on further exposure to the
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                                                                                                                                                                                                                                                                                                                 of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 489 BP; 159 A; 79 C; 95 G; 156 T; 0 other;
                                                                                                                                                                                                                                                                                                            Use of Interleukin-15 - to enhance immunogenicity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 489; DB 19;
Pred. No. 2.4e-229;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                           5-6; 5pp; English.
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93US-0031399.
94US-0233606.
95US-0393305.
95US-0504042
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Matches 489; Conservative
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                                                                                                                                                         (IMMV ) IMMUNEX CORP.
                                                                                                                                                                                                                                             WPI; 1998-285678/25
                                                                                                                                                                                                                                                                                                                                                        Disclosure; Column
                                                                                                                                                                                                                                                                       P-PSDB; AAW53878.
                                                                                                                                                                                                   Grabstein KH,
                                       19-JUL-1995;
08-MAR-1993;
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22-FEB-1995;
19-JUN-1995;
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GAGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCCTAGCAAACAAC 360
GCAGGGCTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAATT
                                                                                                                             GAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACGGAAAGTGATGTTCAC
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22-APR-1994;
04-OCT-1996;
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                                                                                                                                      up.t.neilum derived T-cell factor; ETF; simian; gastrointestinal disease;
B-cell stimulation; epithelium; villi; CD4+; CD8+; T-cell stimulation;
treatment; prevention; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Treatment or prevention of gastrointestinal diseases – by administering epithelium-derived T-cell factor polypeptide
                                                                                                                                                                                                                                                                              /*tag= c
/product= ETF
/note= "Epithelium-derived T-cell factor"
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                                                                                                                          Simian epithelium derived T-cell factor DNA
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49..486
                                                            BP
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93US-0031399.
94US-0233606.
                                                         AAV02873 standard; DNA; 489
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                                                                                                     (first entry)
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      481 acttcttga 489
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08-MAR-1993;
22-APR-1994;
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                                                                               AAV02873;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rauch C;
                                                                                                                                                                                          Simian.
                                                                                                                                                                                                                Key
                                                AAV0287
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480

420

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Epithelium-derived T-cell factor; ETF; immunoassay; enteritis; ulcer; T cell proliferation; gastrointestinal disease; mucositis; colitis; gastroenteritis; villus atrophy; malignancy; inflammatory bowel disease; human immune deficiency virus; tumour; simian; ss.
                                                  Simian epithelium-derived T-cell factor (ETF) encoding DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fung V, Grabstein
                                                                                                                                                                                                                                                                                                                                                                                                                                                          93US-0393305.
93US-0031399.
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P-PSDB; AAY03756, AAY03757
(first entry)
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Rauch C;
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Gaps

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Indels

Length 489

100.0%; Score 489; DB 19; 100.0%; Pred. No. 2.4e-229; iive 0; Mismatches 0;

Matches 489; Conservative

Similarity

Query Match

Best Local

(first entry)

09-MAY-2000

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The invention relates to an isolated antibody that binds specifically to a similan or human epithelium-derived T-cell factor (ETF) polypeptide. The antibodies are used, optionally when immobilized or labeled, to detect and quantify ETF in standard immunosasays. They may also be used as diagnostic and therapeutic agents, e.g. when conjugated to toxins (or their precursors) or radionuclides. ETF induces prolliferation and/or differentiation of T cells (or their precursors), e.g. for use in certablishing long term in vitro cultures; and is also used to treat gastrointestinal disease (e.g. enteritis or mucositis induced by chemotherapy or radiation, peptide ulcer, gastroenteritis, colitis, villus atrophy, malignancy and inflammatory bowel disease, to treat human immune deficiency virus infection or associated disease, or generally in any struation requiring stimulation of T or B cell compressed anti-infection of immunoglobulins or certain cytokines, increased anti-infection of tumour or virus-infected cells. The presents a DNA encoding a simian ETF precursor
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Antibodies specific for epithelium-derived T-cell growth factor
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100.0%; Pred. No. 2.4e-229;
ive 0; Mismatches 0;
                                34pp; English
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Best Local Similarity 100.
Matches 489; Conservative
                                                                                                                                                                                                                                                                                                                                                   polypeptide sequence
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AAZ90032;

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This sequence represents the human interleukin 15 (IL-15) nucleotide sequence. The IL-15 nucleotide sequence and the protein encoded by it can be used to determine and create antagonists of IL-15. An antagonist of IL-15 can be used for treating an inflammatory bowel disease (IBD). The Invention relates to the treatment of cellac disease using IL-15 antagonists. The antagonists are preferably mutehns of IL-15, antibodies against IL-15 or IL-15 molecules bound to chemical groups that interfere the ability of IL-15 to effect a signal transduction through either the alpha or the gamma subunit of the IL-15 receptor complex. The IL-15 antagonists of the invention can be used to treat irritable bow disease
                                                                                                                                                                                                                                                                                                                                                         treating an inflammatory bowel
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                                                         IL-15; antagonist; irritable bowel disease; IBD;
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ilarity 100.0%; Pred. No. 2.4e-229;
Conservative 0; Mismatches 0;
                             (IL-15) nucleotide sequence
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                                                                                                                                                                                                                                                                                                                                                         Use of antagonists of interleukin-15 disease, particularly celiac disease
                                                                         treatment; human; ss.
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                             Human interleukin-15
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P-PSDB; AAY78595.
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Best Local Similarity
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                                                         Interleukin-15;
                                                                          celiac disease;
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                                                                                                      Homo sapiens.
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                                                                                                                                                                                                                                         EFF; epithelium-derived T-cell factor; T-cell; T-lymphocyte; proliferation; differentiation; growth factor; precursor; mature; CD4+; gastrointestinal; epithelium; cell culture; treatment; HIV; gastrointestinal disease; gastroonteritis; colitis; liflammatory bowel disease, villus atrophic disorder; enteritis; chemcharapy; att toxicity; cancer; side effect;
         361 agtttgtcttctaatgggaatgtaacagaatctggatgcaaagaatgtgaggaactggag 420
                                           "Simian ETF precursor protein (AAY52308)"
                             GAAAAAAATATTAAAGAATTTTTGCAGAGTTTTGTACATATTGTCCAAATGTTCATCAAC
Stimulation of T-cells in human immunodeficiency virus infected
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93US-0031399.
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08-MAR-1993;
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could be used to augment the destruction of tumour cells or virally-infected cells. ETF may also be used to treat or prevent gastrointestinal disease, including chemotherapy and radiotherapy associated enteritis, gastroenteritis, colitis, inflammatory bowel disease and villus atrophic disorders. Chemotherapy and radiotherapy associated enteritis (gut choxicity) results in bleeding and sepsis due to gastrointestinal flora entering the blood, and thus can limit the dosage of therapeutic agent administered to a cancer patient. ETF may therefore be used to increase the tolerated doses radiotherapy and chemotherapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; interleukin 15; IL-15; gene therapy; chromosome 4q31; infection;
drug screening; anthropological lineage; paternity testing; HIV;
Human Immunodeficiency Virus; forensic application; T-cell leukaemia; ds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 ctaaacagtcattttctaactgaagctggcattcatgtcttcattttgggctgtttcagt 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 gcagggcttcctaaaacagaagccaactgggtgaatgtaataagtgatttgaaaaaaatt 180
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                                                                                                                                                                                                                                                             Length 489;
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                                                                                                                                                                                                   Sequence 489 BP; 159 A; 79 C; 95 G; 156 T; 0 other;
                                                                                                                                                                                                                                                                ; Score 489; DB 21;
; Pred. No. 2.4e-229;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human interleukin 15 (IL-15) DNA coding sequence.
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                                                                                                                                                                                                                                                             Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 489; Conservative 0;
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New antibodies that specifically binds epithelium-derived T-cell factor polypeptide useful for e.g. treating or preventing gastrointestinal diseases, HIV and HIV-associated diseases, augmenting destruction of tumour cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Epithelium-derived T-cell factor; ETF; simian; human; enteritis; gastrointestinal disease; mucositis; peptic ulcer; cytostatic; villus atrophic disorder; inflammatory bowel disease; antiinflammatory; anti-HIV; antiviral; T-lymphocyte stimulator; ss.
                                                                                                                                                                                            361 AGTTTGTCTTCTAATGGGAATGTAACAGAATCTGGATGCAAAGAATGTGAGAACTGGAG 420
                                                                                                                                                                                                                                                                               CCCAGTTGCAAAGTAACAGCAATGAAGTGCTTTCTCTTGGAGTTACAAGTTATTTCACTT
                                            GAGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCCTAGCAAACAAC
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/note= "specifically claimed (see AAB62013)"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; Column 35-36; 35pp; English.
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96US-0725969.
93US-0031399.
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/product=
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08-MAR-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present sequence is human interleukin-15 (IL-15) DNA coding sequence located on chromosome 4931. The polymorphic variants of IL-15 genes are useful for studying the expression and function of IL-15 and expressing IL-15 protein for use in screening for candidate drugs to treat diseases covered in the period of IL-15 publication of IL-15 activity. Genotyping or haplotyping an individual at the covel IL-15 polymorphic sites are useful for studying population diversity, anthropological lineage the significance of diversity and clineage of the phenotypic level, patternity testing, forensic applications differentifying associations between IL-15 genetic variation and a trait such as level of drug response or usceptibility to disease.

Infections human immundeficiency virus and T-cell leukemia. The infections, human immundeficiency virus and T-cell leukemia. The dentification of an association between a clinical response and a genotype or haplotype (or haplotype pair) for the IL-15 gene may be the basis for designing a diagnostic method to determine those individuals who will or will not respond to the treatment, or alternatively, will respond at a lower level and thus may require more treatment, i.e. a construct on a level of a drug The genotyping or haplotyping and those are also useful for developing drugs targetting IL-15. The genotyping and the application of an iL-15 isogene and also in gene the arrange of function of an IL-15 isogene and also in gene the arrangement of an iL-15 isogene may be turned off by transforming that a targetted organ, tissue or cell population of an expression of an arrangement of a drag of an expression of an arrangement of an a
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100.0%; Pred. No. 2.4e-229;
ive 0; Mismatches 0;
/product= "Human IL-15 protein"
                                                                                                                                                                                                                                                             Denton RR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Fig 2; 78pp; English.
                                                                                                                                                                                                                   (GENA-) GENAISSANCE PHARM INC.
                                                                                                                                                                        08-FEB-2000; 2000US-0181059.
                                                                                                                             08-FEB-2001; 2001WO-US04130
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Best Local Similarity 100.
Matches 489; Conservative
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                                                                                                                                                                                                                                                                                                   2001-522460/57.
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                                          WO200158914-A2
                                                                                                                                                                                                                                                             Anastasio AE,
                                                                                   16-AUG-2001
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           The invention relates to simian and human epithelium-derived T-cell polypeptides. Antibodies that specifically bind to the ETF polypeptides are used for treating or preventing gastrointestinal diseases, such as chemotherapy and radiation therapy-induced enteritis and mucositis, peptic ulcer disease, villus atrophic disorders and inflammatory bowl disease; for increasing tolerated doses for radiation therapy and chemotherapy agents which are limited by gastrointestinal therapy and chemotherapy agents which are limited by gastrointestinal antibodies are further used to treat a variaty of other diseases or conditions where it is desired to stimulate proliferation of T-lymphocytes and B lymphocytes, or the secretion of immunoglobulin B lymphocytes, to augment the destruction of tumour cells infected with virus. The present sequence represents a cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTAAACAGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGT 120
                                                                                                                                                                                                                                                                                                                                                                                                              GCAGGGCTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATT 180
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                                                                                                                                                                                                                                                                                                                                                          present sequence represents a cDNA
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rheumatoid arthritis; inflammatory disorder; ds.
                                                                                                                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                                                                   100.0%; Score 489; DB 22; Length 489; 100.0%; Pred. No. 2.4e-229; Ive 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                        Sequence 489 BP; 159 A; 79 C; 95 G; 156 T; 0 other;
                                                                                                                                                                                                                encoding the simian ETF (SETF) polypeptide.
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Best Local Similarity 100.0
Matches 489; Conservative
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The present sequence describes an isolated RNA molecule which specifically cleaves mRNA encoding interleukin 15 (IL-15). The enzymatic RNA molecules can bind to and cleave mRNA encoding IL-15. They can be used for treating disorders associated with IL-15 such as inflammatory disorders, e.g. rheumatoid arthritis by inhibiting the synthesis of IL-15 in lymphocytes and preventing the recruitment and activation of macrophages. They can also be used to develop transgenic animals which can be used to identify the impact of increased or decreased IL-15 levels on a particular pathway or phenotype. The present sequence represents a human IL-15 DNA sequence.
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100.0%; Pred. No. 2.4e-229;
live 0; Mismatches 0;
                                                                                                                                                                                                                  New ribozymes targeted to interleukin-15 mRNA
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                                                                                                                                                                     Veerapaneni
                                                                                                                                                                                                                                            Disclosure; Fig 8; 46pp; English.
                                                                                                                                         (HISM ) HISAMITSU PHARM CO LID.
                                                                                        98WO-IB01837
                                                                                                               97US-0962503
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Best Local Similarity 100.
Matches 489; Conservative
                                                                                                                                                                    Nozawa I,
                                                                                                                                                                                           WPI; 1999-313334/26
             Homo sapiens
                                                                                                               31-OCT-1997;
                                   W09923208-A2
                                                                                      29-OCT-1998;
                                                                                                                                                                   Hamanaka S,
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The present invention describes low adenosine (A) content antisense oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a "Universal" or alternative base. (I) can have respiratory, bronchodilator, antinflammatory, analgesic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down regulate the expression and or activity of target polypeptides associated with lung/respiratory disorders and mallianancies, such as stimulating and activating peptide factors and transmitters, transcription factors, immunodiobulins and antibodaes, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adhesion molecules and their receptors, cytokine and chemokine receptors, adenosine receptors, bradykinin receptors, central nervous system (CNS) and peripheral nervous and non-nervous system creeptors, adenosine receptors, bradykinin receptors, central nervous system (CNS) and peripheral nervous and non-nervous system creeptors, binding proteins and mallianancy associated proteins. The antisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or surfactant hypoproduction which are associated with a disease of and/or surfactant hypoproduction, respirator, inflammation, and/or surfactant hypoproduction, respirator, inflammation, and/or systic fibrosis (CF), allergic rhinitis (AR), pulmonary (CRP), palm, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary transplantation rejection, pulmonary infections, bronchitis,
                                                                                                                                                                                                                      Low adenosine antisense oligonucleotide, phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletuo; respiratory; bronchodilator; antinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions -
                                                                                                                                                                               Human low adenosine antisense oligonucleotide related seguence #2909.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 1344-1345; 1592pp; English.
                                           AAF21342 standard; DNA; 1202 BP.
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(NYCE/) NYCE J W.
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                                                                                                                                                                                                                                                                                                                                                                                                                                             cancer; ss.
                                                                                          AAF21342;
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                     AAF21342
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to AAF21543 represent human polynucleotide oligonucleotides used in the exemplification of
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                                          Seguence 1202 BP; 355 A; 219 C; 249 G; 379 T; 0 other;
                                                                       100.0%; Score 489; DB 21;
100.0%; Pred. No. 2.4e-229;
ive 0; Mismatches 0;
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   and/or cancer. AAF18434 fragments and antisense
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                        the present invention.
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AAAS8037) capable of inhibiting the expression of the interleukin-15 (IL-15) by hybridising to IL-15 mRNA (AAAS8044). IL-15 is a member of the short chain, 4 alpha helix bundle cytokine family and is a potent T-cell growth factor and activator. IL-15 acts as a stimulator of various T-cell mediated pathological immune responses, such as autoimmune disorders (e.g., rheumatoid arthritis, graft versus host disease and organ transplant rejection), and has a proinflammatory role in rheumatoid arthritis synovitis. The antisense oligonucleotides are useful for inhibiting IL-15 production and are thus useful for alleviating inflammatory polyarthopathy associated with rheumatoid arthritis, organ transplant rejection (e.g., kidney transplant rejection; cell transplant rejections, asthma, lupus erythematosus and inflammatory bowel disease. The present sequence represents a cDNA copy of human in the man and in the man of th
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             invention relates to antisense oligonucleotides (AAA58045,
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                                                                                                                                                                                                                                                                                                                                                                                  (UYNE ) UNIV
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                                                                                                                                            GCAGGCCTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTTGAAAAATT 180
                                                                                                                                                         GAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACGGAAAGTGATGTTCAC 240
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                                                                                                                     ctaaacagtcattttctaactgaagctggcattcatgtcttcattttgggctgtttcagt 436
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100.0%; Score 489; DB 21; 100.0%; Pred. No. 2.4e-229;
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The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic, andiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, antiathmation, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating effects afflict the lungs of a subject. They can be used for treating of a subman, impeded respiration, respiratory distress syndrome, pain, cystic fubrosis, pulmonary hypertension, emphysema, chronic obstructive culmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ONs reduces side effects. The A-containing ONS break down with the release of deoxyadenosine which activates adenosine receptors causing bronch constriction and inflammation. AAA32313 to AAA33312 represent the nucleotide sequences given in the sequence listing from the present convent content of invention, which correspond to SEQ ID NO:1 to 2815, and then the last content of the adenosine receptors causing invention, which correspond to SEQ ID NO:1 to 185, but the sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
677 agtttgtcttctaatgggaatgtaacagaatctggatgcaaagaatgtgaggaactggag 736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
                                                                      421 GAAAAAAATATTAAAGAATTTTTGCAGAGTTTTGTACATATTGTCCAAATGTTCATCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstriction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                                                                                                                                                                                Human adenosine receptor related polynucleotide 2nd SEQ ID NO:94.
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Matches 489; Conservative
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(AAA32333 to AAA33992) are specifically claimed ONs from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences given in the sequence listing.
                                                                                                                                                                                                                                CTAAACAGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGT 120
                                                                                                                                                                                                   ctaaacagtcattttctaactgaagctggcattcatgtcttcattttgggctgtttcagt 436
                                                                                                                                                                                                                                                                                                  CCCAGTTGCAAAGTAACAGCAATGAAGTGCTTTCTCTTGGAGTTACAAGTTATTTCACTT 300
                                                                                                                                                                                                                                                                                                                                         GAGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCCTAGCAAACAAC 360
                                                                                                                                                                                                                                                                                                                                                                                 AGTITGICITCIAAIGGGAATGIAACAGAAICIGGAIGCAAAGAAIGIGAGGAACIGGAG 420
                                                                                                                                                                                                                                                                                                                                                                                                     agtttgtcttctaatgggaatgtaacagaatctggatgcaaagaatgtgaggaactggag 736
                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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                                                                                                                                                                                                                                                                                                              GAAAAAAATATTAAAGAATTTTTGCAGAGTTTTGTACATATTGTCCAAATGTTCATCAAC
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                                                                                                 Length 1202;
                                                                                                                     Indels
                                                                  Sequence 1202 BP; 355 A; 219 C; 249 G; 379 T; 0 other;
                                                                                              100.0%; Score 489; DB 21;
100.0%; Pred. No. 2.4e-229;
ive 0; Mismatches 0;
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                                                                                                                     Conservative
                                                                                                          Local Similarity
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                                                                                               Query Match
Best Local Simi
Matches 489;
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Gaps 9

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Indels

Score 489; DB 21; Pred. No. 2.4e-229; ; Mismatches 0;

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100.0%;

Length 1202;

376

436 180 240 556 300 919 360 919 420 736 480

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This invention describes novel antisense oligonucleotides of 8-40 nucleic acids, targeted to interleukin-15 (IL-15). The products of the invention have anti-ILIA, anti-Inflammatory, hepatotropic, anti-arthritic, neuroprotective, antiproliferative and antiulcer activity and can be used for gene therapy. The antisense oligonucleotides are used to inhibit interleukin-15 (IL-15) expression and production, and prevent the recruitment and activation of macrophages. They are used to treat diseases associated with an increased expression of IL-15. Such diseases include inflammatory disorders, such as inflammatory bowel disease, arthritis, cirrhosis, multiple sclerosis, chronic liver disease, arthritis, cirrhosis, multiple sclerosis, chronic liver disease, in vivo or ex vivo. The antisense oligonucleotides of the invention are specific for interleukin-15 (IL-15), and can be delivered exogenously or can be expressed from DNA or RNA vectors. This sequence encodes
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inhibit
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                                                                                                                                                                                                                                                                                                             Novel antisense oligonucleotides targeted to interleukin-15 treat inflammatory diseases and cell proliferative diseases inflammatory bowel disease and chronic liver disease
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                                                                                                                                                          Nozawa
                                                                                                                                                          Hiroyuki K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Fig 1; 52pp; English.
                                                                             (HISM ) HISAMITSU PHARM CO LTD.
98US-0091873
                                                                                                                                                          Hamanaka S,
                                                                                                                                                                                                                                    WPI; 2000-171026/15.
                                                                                                                                                          Veerapanane D,
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Gaps

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Indels

Length 17904;

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condition selected from pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
                                                      Human low adenosine antisense oligonucleotide related sequence #2912.
                                                                                                                                                                                                                                                                                                  Disclosure; Page 1349-1353; 1592pp; English.
             AAF21345 standard; DNA; 17904 BP
                                                                                                                                                                                            24-MAR-2000; 2000WO-US08020.
                                                                                                                                                                                                                        EAST CAROLINA.
                                         (first entry)
                                                                                                                                                                                                                                                          WPI; 2000-679539/66.
                                                                                                                                                                                                                       (UYEC-) UNIV EAST (NYCE/) NYCE J W.
                                                                                                                                                                WO200062736-A2..
                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                          06-APR-1999;
                                         14-MAR-2001
                                                                                                                                                                              26-OCT-2000
                                                                                                                                     cancer; ss.
                           AAF21345;
                                                                                                                                                                                                                                            Nyce JW;
19
      PAF21345
RESULT
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fragments and antisense oligonucleotides used in the exemplification of the present invention.
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                                                                                                                                                                                                                                                                                                                                                       61 CTAAACAGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                      121 GCAGGGCTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATT 180
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                                                                                                                                                                                                                                                       Interleukin-15; FL-15; mutant; human; treatment; autoimmune disease; psoriasis; multiple sclerosis; rheumatic arthritis; immune response;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181 GAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACGGAAAGTGATGTTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241 CCCAGTTGCAAAGTAACAGCAATGAAGTGCTTTCTCTTGGAGTTACAAGTTATTTCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17904 BP; 6014 A; 2945 C; 3330 G; 5615 T; 0 other;
                                                                                                                                                        100.0%; Score 489; DB 21;
100.0%; Pred. No. 2.3e-229;
ive 0; Mismatches 0;
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/*tag= a
/product= "interleukin-15"
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Matches 489; Conservative
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                                                                                                                                                                                                                                                                                           Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antihinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pain; cystic fibrosis; allergic rhinitis; cannot obstructive pulmonary disease; pulmonary infection; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               infections, bronchitis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     pulmonary transplantation rejection, pulmonary infections, bronchit and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
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This DNA encodes a wild type interleukin-15 (IL-15) polypeptide. This wild-type sequence can be mutated at codon positions 149 and 156 to create a mutant IL-15 polypeptide. The mutant polypeptide is at least of dentical to wild-type IL-15 and is capable of inhibiting at least one of the cellular events that normally occurs when wild-type IL-15 specifically binds to a cell surface receptor. The mutant IL-15 is used for suppressing the immune response in a patient. It can be used for treating autoimmune diseases such as rheumatic arthritis, type I diabetes or a rheumatic disease selected from systemic lupus erythematosus (SLE), Slogren's syndrome, scleroderma, mixed connective tissue disease. Carantopositis, polymyositis, Reiter's syndrome and Behcet's disease. Carantopositis, polymyositis, Reiter's syndrome and Behcet's disease. Carantopositis, myasthenia gravis, encephalomyelitis, avariety of pemphigus, psoriasis, inflammatory bowel disease, AIDS and vascular injury. The mutant IL-15 can also be used for reducing the viability of a cell that expresses a IL-15 receptor. It can also be used to diagnose
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "the codon CAG encoding Gln can be substituted by a codon encoding Asp"
                                                                   /note= "the codon CAA encoding Gln can be substituted by a codon encoding Asp"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 CTAAACAGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACGGAAAGTGATGTTCAC 240
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                                                                                                                                                                                                                                                                                                                                                                                Mutant interleukin 15 polypeptide(s) - used for diseases e.g psoriasis, multiple sclerosis etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             disease treatable with an IL-15 antagonist.
                                                                                                                                                                                                                                                           (BETH-) BETH ISRAEL DEACONESS MEDICAL CENT.
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                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Pages 54-55; 86pp; English.
                                                                                                                                                                                          97WO-US06931
                                                                                                                                                                                                                          96US-0016634
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Matches 488; Conservative
                                 466..468
                                                                                                                                                                                                                                                                                              Strom T;
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                                     misc_feature
                                                                                                                                                                                          25-APR-1997;
                                                                                                                                                                                                                          26-APR-1996;
                                                                                                                       W09741232-A1
                                                                                                                                                       06-NOV-1997
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This DNA encodes a mutant interleukin-15 (IL-15) polypeptide. The wild-type IL-15 sequence was mutated at codon positions 149 and 156 to create this mutant IL-15 polypeptide. This mutant polypeptide is at least
421 GAAAAAAATATTAAAGAATTTTTGCAGAGTTTTGTACATATTGTCCAAATGTTCATCAAC 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mutant interleukin 15 polypeptide(s) - used for treating auto-immune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Interleukin-15; IL-15; mutant; human; treatment; autoimmune disease; psociasis; multiple sclerosis; rheumatic arthritis; immune response; type 1 diabetes; AIDS; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "wild-type codon CAG encoding Gln is mutated by codon GAC encoding Asp" 466..468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag= e
/note= "wild-type codon CAA encoding Gln is mutated
by codon GAC encoding Asp"
                                                                                   AGTTTGTCTTCTAATGGGAATGTAACAGAATCTGGATGCAAAGAATGTGAGGAACTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag= a //product= "mutant IL-15 polypeptide" //product= //produc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    diseases e.g psoriasis, multiple sclerosis etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (BETH-) BETH ISRAEL DEACONESS MEDICAL CENT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mutant interleukin-15 (IL-15) encoding DNA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAT97228 standard; DNA; 489
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                                                                                                                                                                                                                                                                                                 481 ACTTCTTGA 489
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Synthetic.
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Homo sapiens

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90% identical to wild-type IL-15 and is capable of inhibiting at least one of the callular events that normally occurs when wild-type IL-15 pecifically binds to a cell surface receptor. The mutant IL-15 is used for suppressing the immune response in a patient. It can be used for treating autoimmune diseases such as rheumatic arthritis, type I diabetes or a rheumatic disease selected from systemic lupus erythematosus (SLE), Slogren's syndrome, scleroderma, mixed connective tissue disease, dermatomycostiis, polymycostiis, Reiter's syndrome and Behcer's disease. It can also be used to treat Hashimoto's thyroiditis, Grave's disease, multiple sclerosis, myasthenia gravis, encephalomyelitis, a variety of pemphigus, psoriasis, inflammatory bowel disease, AIDS and vascular injury. The mutant IL-15 can also be used for reducing the viability of a cell that expresses a IL-15 receptor. It can also be used to diagnose a disease treatable with an IL-15 antagonist.
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Sequence 489 BP; 158 A; 80 C; 96 G; 155 T; 0 other;

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                                                                                          CTAAACAGTCATTTTCTAACTGAAGCTGGCAFTCATGTCTTCATTTTGGGCTGTTTCAGT 120
                                                                                                     GCAGGGCTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAATT 180
                                                                                                                                                GAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACGGAAAGTGATGTTCAC 240
                                                                                                                                                                                                    gaagatettatteaatetatgeatattgatgetaetttatatacggaaagtgatgtteae 240
                                                                                                                                                                                                                           CCCAGTTGCAAAGTAACAGCAATGAAGTGCTTTCTCTTTGGAGTTACAAGTTATTCACTT 300
                                                                                                                                                                                                                                       GAGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCCTAGCAAACAAC 360
                                                                                                                                                                                                                                                                                            gagtecggagatgeaagtatteatgatacagtagaaaatetgateatectageaageaac 360
                                                                                                                                                                                                                                                                                                                 AGTITGTCTTCTAATGGGAATGTAACAGAATCTGGATGCAAAGAATGTGAGGAACTGGAG 420
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 Length 489;
                         Indels
            Pred. No. 2.2e-182;
  80.4%; Score 393; DB 18; 99.8%; Pred. No. 2.2e-182;
                       0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                        GAAAAAATATTAAAGAATTTTTG
Query Match
Best Local Similarity 99.8
Matches 443; Conservative
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Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
                                                                                                                                                                             Human adenosine receptor related polynucleotide 2nd SEQ ID NO:97.
                                           AAA35223 standard; DNA; 17844 BP
                                                                                                                               28-JUL-2000 (first entry)
                                                                                      AAA35223;
22
                      AAA35223
RESULT
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cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

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antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic.

Contiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired allways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, pain, cystic fibrosis, pulmonary pypertension, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, memphysem, chronic obstructive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the olvs reduces side effects. The A-containing ONS break down with the release of decoyadenosine which activates adenosine receptors causing bronchoconstriction and inflammation. AAA32313 to AAA33312 represent the nucleotide sequences given in the sequences. SEQ ID NO:11 to 186; but the sequences of differ from the previously named sequences. SEQ ID NO:11 to 186; differ from the prevent claimed ONS from the present in the invention of the present clayers. In the sequences of the prevent clayers of the once match up with their corresponding SEQ ID NO: Sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            105 TTTGGGCTGTTTCAGTGCAGGGCTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAG 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           284
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         225 GGAAAGTGATGTTCACCCCAGTTGCAAAGTAACAGCAATGAAGTGCTTTCTCTTGGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ggaaagtgatgttcaccccagttgcaaagtaacagcaatgaagtgctttctcttggagtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            285 ACAAGTTATTTCACTTGAGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGAT
                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstriction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   present invention describes a new composition comprising an
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100.0%; Pred. No. 1.7e-178;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 1264-1268; 1343pp; English.
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                                                                                                                                            99WO-US17712
                                                                                                                                                                                   98US-0095212
                                                                                                                                                                                                                             (UYEC-) UNIV EAST CAROLINA
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                                                                                                                                                                                                                                                                                                            WPI; 2000-205971/18.
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                                                         WO200009525-A2
                                                                                                                                                                                   03-AUG-1998;
                                                                                                                                          03-AUG-1999;
                                                                                                  24-FEB-2000
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The present invention describes low adenosine (A) content antisense oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a "Universal" or alternative base. (I) can have respiratory, bronchodilator, antiinflammatory, analgesic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with unig/respiratory disorders and malignancies, such as stimulating and activating peptide factors and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adhesion molecules and their receptors, cytokine and chemokines, enceptors, adenosine receptors, bradykinin receptors; central nervous system (CNS) and peripheral nervous and non-nervous system receptors, CNS and peripheral nervous and non-nervous system receptors, cransmitters, defensins, growth factors, vasoactive peptides and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antihinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions -
                                         catcctagcaaacaacagtttgtcttctaatgggaatgtaacagaatctggatgcaaaga 1908
                                                                                                     CATCCTAGCAAACAACAGTTTGTCTTCTAATGGGAATGTAACAGAATCTGGATGCAAAGA 404
                                                                                   ATGTGAGGAACTGGAGGAAAAAATATTAAAGAATTTTTGCAGAGTTTTGTACATATTGT 464
                                                                                                                                                                                                                                                                                                                                                                                                                                               Human low adenosine antisense oligonucleotide related sequence #2911.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 1348-1349; 1592pp; English.
                                                                                                                                                                                        ccaaatgttcatcaacacttcttga 1993
                                                                                                                                                                  CCAAATGTTCATCAACACTTCTTGA 489
                                                                                                                                                                                                                                                                                                                    AAF21344 standard; DNA; 486 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200062736-A2.
                                                                                                                                                                                                                                                                                                                                                                                                   14-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-APR-1999;
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                                                                                                                                                                                                                                                                                                                                                             AAF21344;
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receptors, binding proteins and malignancy associated proteins. The antisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or lung inflammation, allergy(les) and/or surfactant hypoproduction which are associated with a disease or condition selected from pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), pulmonary transplantation rejection, pulmonary infections, bronchitis, and/or cancer. AAR18434 to AAR21543 represent human polynucleotide fragments and antisense oligonucleotides used in the exemplification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischeamic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
                                                                                                                                                                                                                                                                                                                                                                                       141 AGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAATTGAAGATCTTATTCAATCTAT 200
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            201 GCATATTGATGCTACTTTATATACGGAAAGTGATGTTCACCCCAGTTGCAAAGTAACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               261 AATGAAGTGCTTTCTCTTGGAGTTACAAGTTATTTCACTTGAGTCCGGAGATGCAAGTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGTAACAGAATCTGGATGCAAAGAATGTGAGGAACTGGAGGAAAAAAATATTAAAGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCATGATACAGTAGAAAATCTGATCATCCTAGCAAACAACAGTTTGTCTTCTAATGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human adenosine receptor related polynucleotide 2nd SEQ ID NO:96.
                                                                                                                                                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                                                                                              Length 486;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITGCAGAGITITGTACATATIGICCAAATGTICATCAACACTICTIGA 489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                           Sequence 486 BP; 154 A; 81 C; 100 G; 151 T; 0 other;
                                                                                                                                                                                                                                                                                                              Score 349; DB 21; L
Pred. No. 7.3e-161;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                71.4%; Scc
100.0%; Pr
tive 0;
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                                                                                                                                                                                                                           the present invention.
                                                                                                                                                                                                                                                                                                                                  Similarity
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Best Local S
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BP.

AAT00527 standard; cDNA; 345

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AAT00527 RESULT

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The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which antisense oligonucleotide (ON) with low adenosine (up to 15%), which cargines nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic.

Cusful for the treatment of diseases associated with inflammation, antiasthmatic, cytostatic and analgesic activities. The compositions are impaired airways, including lung disease and diseases whose secondary of a subject. They can be used for treating effects afflict the lungs of a subject. They can be used for treating confitions, pulmonary vasconstriction, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic ibrosis, pulmonary hypertension, emphysema, chronic obstructive cartinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ONS reduces side effects. The A-containing ONS break down with the release of deoxyadenosine which activates adenosine content of the onchoconstriction and inflammation. AAA33313 to AAA35312 represent the nucleotide sequences given in the sequence listing from the present convention, which correspond to SEQ ID NO:11 to 1885, but the sequences differ from the previously named sequences. SEQ ID NO:11 to 1680

(AAA32331 to AAA33923 are specifically claimed ONS from the present convention N.B. Sequences given in the disclosure of the present convention do not match up with their corresponding SEQ ID NO: sequences convention and provided sequences of the present convention of the match up with their corresponding SEQ ID NO: sequences convention.
                                                                                                                                                                                                           New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstriction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 1264; 1343pp; English.
  98US-0095212
                                                     (UYEC-) UNIV EAST CAROLINA
                                                                                                                                                           WPI; 2000-205971/18
03-AUG-1998;
                                                                                                        Nyce JW;
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.; 0 141 AGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGATCTTATTCAATCTAT 200 Gaps GCATATTGATGCTACTTTATATACGGAAAGTGATGTTCACCCCAGTTGCAAAGTAACAGC ö Length 486; 441 TTTGCAGAGTTTTGTACATATTGTCCAAATGTTCATCAACACTTCTTGA 489 Indels 71.4%; Score 349; DB 21; I 100.0%; Pred. No. 7.3e-161; tive 0; Mismatches 0; Local Similarity 100. Les 349; Conservative Query Match Best Loca Matches 179 (599 197 239 381 201 321 δ g 엄 ò g ò a ö g ö g ò

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  264
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IL-15 polypeptide. It is a generic sequence which encompasses both
AAR83309 (simian) and AAR83310 (human) IL-15 mature polypeptides.
                                                                                                       Interleukin-15; epithelium-derived T-cell factor; T lymphocyte; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Isolated DNA encoding polypeptide with mammalian IL-15 activity stimulates proliferation and differentiation of T cells, used for treating carcinoma(s), melanomas, etc. and viral infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 145 AACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGATCTTATTCAATCTATGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             205 ATTGATGCTACTTTATACGGAAAGTGATGTTCACCCCAGTTGCAAAGTAACAGCAATG
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                                                                                                                                                                                                                 precursor nts 145-489
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                                                                                                                                                                                                                                                                                                                                                                                                             Anderson DM, Eisenman JR, Fung V, Grabstein KH;
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Matches 345; Conservative 0; Mismatches
                                                                         Human interleukin-15 mature polypeptide.
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                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 3; Page 28-29; 48pp; English.
                                                                                                                                                                                                              /label= corresp.
/note= "claimed"
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/*tag=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         P-PSDB; AAR83310.
                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                    06-APR-1994;
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                                            02-FEB-1996
                                                                                                                                                                                                                                                         W09527722-A
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               AAT00527;
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Sequence 486 BP; 154 A; 81 C; 100 G; 151 T; 0 other;

us-09-724-841-1.oli12.rng

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WO200062736-A2
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(NYCE/) NYCE
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                                                                                                             Best Local Simi
Matches 345;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to simian and human epithelium-derived T-cell factor (ETF) polypeptides. Antibodies that specifically bind to the ETF polypeptides are used for treating or preventing gastrointestinal diseases, such as chemotherapy and radiation therapy-induced enteritis and mucositis, peptic ulcer disease, villus atrophic disorders and inflammatory bowel disease; for increasing tolerated doses for radiation therapy and chemotherapy agents which are limited by gastrointestinal toxicity; and for treating HIV and HIV-associated diseases. The antibodies are further used to treat a variety of other diseases or conditions where it is desired to stimulate proliferation of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antibodies that specifically binds epithelium-derived T-cell factor polypeptide useful for e.g. treating or preventing gastrointestinal diseases, HIV and HIV-associated diseases, augmenting destruction of
                                                                                                                                                                                                                                                                                          Epithelium-derived T-cell factor; ETF; simian; human; enteritis;
gastrointestinal disease; mucositis; peptic ulcer; cytostatic;
villus atrophic disorder; inflammatory bowel disease; antiinflammatory;
anti'HIV; antiviral; T-lymphocyte stimulator; ss.
                                                                                       aagtgetttetettggagttacaagttattteaettgagteeggagatgeaagtatteat 180
                               384
                                                                            ACAGAATCTGGATGCAAAGAATGTGAGGAACTGGAGGAAAAAAATATTAAAGAATTTTTTG 444
                                                       gatacagtagaaaatctgatcatcctagcaaacaacagtttgtcttctaatgggaatgta
                                GATACAGTAGAAAATCTGATCATCCTAGCAAACAACAGTTTGTCTTCTAATGGGAATGTA
Rauch C;
                                                                                                                                    445 CAGAGITITGIACAIAITGICCAAAIGIICAICAACACIICIIGA 489
                                                                                                                                                                                                                                                                     (SETF) mature polypeptide encoding cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fung V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eisenman JR,
                                                                                                                                                                                                                                                                                                                                                                                              /*tag= a
/product= "mature sETF"
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96US-0725969.
93US-0031399.
94US-0233606.
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P-PSDB; AAB62013.
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08-MAR-1993;
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T-lymphocytes and B lymphocytes, or the secretion of immunoglobulin B lymphocytes, to augment anti-infectious disease immunity, to induce CTL, LAK or NK lytic activity, or to augment the destruction of tumour cells or cells infected with virus. The present sequence represents a cDNA encoding the simian ETF (SETF) mature polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           145 AACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGATCTTATTCAATCTATGCAT 204
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                                                                                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                                                                                                                                                              ATTGATGCTACTTTATATACGGAAAGTGATGTTCACCCCAGTTGCAAAGTAACAGCAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGTGCTTTCTCTTGGAGTTACAAGTTATTTCACTTGAGTCCGGAGATGCAAGTATTCAT
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0
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                                                                                                                                                               Sequence 345 BP; 121 A; 49 C; 68 G; 107 T; 0 other;
                                                                                                                                                                                                                                          Score 345; DB 22; I Pred. No. 6.6e-159;
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                                                                                                                                                                                                                         70.6%; Scor.
100.0%; Pred. No. c.
0; Mismatches
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J W.
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                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
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AAA35219 standard; DNA; 1248 BP

AAA35219

The present invention describes low adenosine (A) content antisense oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator, antiinflammatory, analgesic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with activating peptide factors and malignancies, such as stimulating and activating peptide factors and malignancies, such as stimulating and activating peptide factors and malignancies, cytokines and activating peptide factors and malignancies, cytokines and centual and antibodies, antibody receptors, cytokine and chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adenosine receptors, bradykinin receptors, central nervous system (CNS) and peripheral nervous and non-nervous system peptide creeptors, defensins, growth factors, vasoactive peptides and receptors, binding proteins and mallinancy associated proteins. The antisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or surfactant hypoproduction which are associated with a disease or condition selected from pulmonary vasoconited pulmonary disease (COPD), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary transplantation rejection, pulmonary disease (COPD), pulmonary transplantation rejection, pulmonary infection, bundons, bronchitis, faragments and antisense oligonucleotides used in the exemplification of the present human polynucleotide Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions -Disclosure; Page 1344; 1592pp; English. WPI; 2000-679539/66

Sequence 1248 BP; 397 A; 209 C; 223 G; 419 T; 0 other;

Disclosure; Page 1260; 1343pp; English.

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GCTGTTTCAGTGCAGGGCTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATT 169 TGAAAAAAATTGAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACGGAAA 229 tgaaaaaaattgaagatcttattcaatctatgcatattgatgctactttatatacggaaa 666 TTATITCACTIGAGICCGGAGAIGCAAGIAITCAIGAIACAGIAGAAAAICIGAICAICC 349 TAGCAAACAACAGTTTGTCTTCTAATGGGAATGTAACAGAATCTGGATGCAAAGAATGTG 409 Gaps GTGATGTTCACCCCAGTTGCAAAGTAACAGCAATGAAGTGCTTTCTCTTTGGAGTTACAAG ; Length 1248; Indels Score 329; DB 21; Pred. No. 4.4e-151; 0; Mismatches 1; 67.3%; 99.7%; TGTTCATCAACACTTCTTGA 489 Conservative Local Similarity Matches 379; Query Match 170 110 230 507 299 290 727 350 187 410 347 g ò ò g ò g ö g g ŏ g ò ò

antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss. Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory; New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstriction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or Human adenosine receptor related polynucleotide 2nd SEQ ID NO:93. 98US-0095212. 99WO-US17712. (UYEC-) UNIV EAST CAROLINA. (first entry) WPI; 2000-205971/18. WO200009525-A2. Homo sapiens. 03-AUG-1999; 28-JUL-2000 33-AUG-1998; 24-FEB-2000 AAA35219; Nyce JW;

The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 13%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic, and and along a clivities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and disease shoose secondary effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, pain, cystic ischaemic conditions, pulmonary vasoconstriction, allergies, pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, excitomary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomasy and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ONs reduces side effects. The A-containing ONs break down with the release of decoyadenosine which activates adenosine receptors causing bronchoconstriction and inflammation. AAA33313 to AAA35312 represent the nucleotide sequences given in the sequence listing from the present invention, which correspond to SEO ID No: 1 to 2815, and then the last invention. N. B. Sequences given in the disclosure of the present invention. N. B. Sequences given in the disclosure of the present invention. N. B. Sequences given in the disclosure of the present invention. No: sequences given in the disclosure of the present invention. No: sequences given in the disclosure of the present invention do not match up with their corresponding SEO ID NO: sequences given in the sequence.

Sequence 1248 BP; 397 A; 209 C; 223 G; 419 T; 0 other;

907

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99US-0127958.
                                                                                                    Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-MAR-2001
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                                                                                                             379;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cancer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                      AAF21343;
                                                                                           Query Match
Best Local 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This sequence encodes the human interleukin-15. The invention relates to entisense compounds that are targeted to a 5' or 3' untranslated region (5'UTR or 3'UTR) of a nucleic acid molecule encoding human interleukin-15 (IL-15), and inhibit the expression of human IL-15. The antisense
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                                                                                                                                                                                                                                                                                                                                                                                                  nterleukin-15; IL-15; antisense inhibitor; untranslated region; 5'UTR; UTR; human; infection; inflammation; tumour; therapy; diagnosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antisense compound useful for inhibiting human interleukin-15 expression useful for treating diseases associated with interleukin-15 expression -
                                                                                                                                                 349
                                                                                                                                                                   786
                                                                                                                                                                                    409
                                                                                                                                                                                                                        469
                                                                                                             289
                                                                                                                              726
                                     GCTGTTTCAGTGCAGGGCTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATT 169
                                                       gctgtttcagtgcagggcttcctaaaacagaagccaactgggtgaatgtaataagtgatt 606
                                                                         TGAAAAAATTGAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACGGAAA 229
                    Gaps
                                                                                    GTGATGTTCACCCCAGTTGCAAAGTAACAGCAATGAAGTGCTTTCTCTTGGAGTTACAAG
                                                                                                                                                  TTATTTCACTTGAGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCC
                                                                                                                                                                                                       tagcaaacaacagtttgtcttctaatgggaatgtaacagaatctggatgcaaagaatgtg
                                                                                                                                                                                                                                          aggaactggagaaaaaaatattaaaagaatttttgcagagttttgtacatattgtccaaa
                                                                                                                      TAGCAAACAACAACTITGICTICIAAIGGGAAIGIAACAGAAICIGGAIGCAAAGAAIGIG
                                                                                                                                                                                                                         AGGAACTGGAGGAAAAAATATTAAAGAATTTTTGCAGAGTTTTGTACATATTGTCCAAA
                                                                                                                                                                                               ;
0
Length 1248;
                   Indels
Score 329; DB 21;
Pred. No. 4.4e-151;
); Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 13; Column 43-44; 31pp; English.
                                                                                                                                                                                                                                                                                                                                                                                 Human Interleukin-15 coding sequence.
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                                                                                                                                                                                                                                                                                                                            AA237358 standard; DNA; 1248
 67.3%;
99.7%;
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                    Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cowsert
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           Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                   Interleukin-15;
                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                04-FEB-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                               US5985663-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-NOV-1999
                    Matches 379;
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  Query Match
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                                                                                           209
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inhibitors are is useful for inhibiting expression of IL-15 in human cells or tissues in vitro, for treating humans or other animals suspected of having or being prone to a disease associated with IL-15 expression, e.g. infections, inflammation or tumours. The inhibitors can also be used for research or diagnostic purposes. Using antisense compounds specifically and effectively inhibits IL-15 function.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; bronchoconstriction; lung inflammatory; is bronchoconstriction; antinflammatory; immunosuppressive; antiasthmatic; analgasic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction, asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
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                                                                                                                                                                                                                                                                                                                                                                                      110 GCTGTTTCAGTGCAGGCTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATT 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                229
                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human low adenosine antisense oligonucleotide related sequence #2910
                                                                                                                                                                                                                                                                                                                                                                                                                      TAGCAAACAACAGTTTGTCTTCTAATGGGAATGTAACAGAATCTGGATGCAAAGAATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          170 TGAAAAAATTGAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGATGTTCACCCCAGTTGCAAAGTAACAGCAATGAAGTGCTTTCTCTTGGAGTTACAAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tagcaaacaacagtttgtcttctaatgggaatgtaacagaatctggatgcaaagaatgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGAACTGGAGGAAAAAAATATTAAAAGAATTTTTGCAGAGTTTTGTACATATTGTCCAAA
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                                                                                                                                                                                                                                                                             Length 1248;
                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                            Sequence 1248 BP; 397 A; 209 C; 223 G; 419 T; 0 other;
                                                                                                                                                                                                                                                                             Score 329; DB 21;
Pred. No. 4.4e-151;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    67.3%;
ilarity 99.7%;
Conservative
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C The present invention describes low adenosine (A) content antisense coligonuclectides and compositions (1) comprising them. In the antisense oligonuclectides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator, antinflammatory, analgesic, communosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with a ctivating peptide factors and transmitters, such as stimulating and immoglobulins and antibodies, antibody receptors, cytokines and chemokines, adhesion molecules and their receptors, cytokine and binding proteins, adhesion molecules and their receptors, central receptors, adhosion molecules and their receptors, central receptors, adhosion molecules and non-nervous system (CNS) and peripheral nervous and non-nervous system creeptors, defensins, growth factors, vasoactive peptides and entisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or surfactant hypoproduction which are associated with a disease or condition selected from pulmonary vasoconstriction, inflammation, condition selected from pulmonary vasoconstriction, inflammation, condition selected from pulmonary vasoconstriction, inflammation, hypotensial conditions especially pulmonary disease or conditions especially pulmonary disease or conditions especially including respiratory obstruction respiratory distress syndrome (CNS); pain, cystic fibrosis (CF), allergic rhinitis (ANS), pulmonary company transplantation rejection, pulmonary pulmonary transplantation rejection, pulmonary including profice and/or surfactant profice and/or surfactions, bulmonary pulmonary including respiratory obstructive pulmonary including respiratory or and/or surfactant profice and/or surfactant profice and/or surfactant profice and/or pulmonary pulmonary disease or hypertension, emphysema, chronic o
                                                                                                                                                                                                                                                                            trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     pulmonary transplantation rejection, pulmonary infections, bronchitis, and/or cancer. AAF18434 to AAF21543 represent human polynucleotide fragments and antisense oligonucleotides used in the exemplification of
                                                                                                                                                                                                                                                                                                                                                                                                                         invention describes low adenosine (A) content antisense
                                                                                                                                                                                                                                            adenosine (A) content antisense oligonucleotides which do not
                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 1345-1348; 1592pp; English.
                            (UYEC-) UNIV EAST CAROLINA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     present invention.
                                                                                                                                                                               WPI; 2000-679539/66
                                                                                                                                                                                                                                                                         trigger adenosine
                                                                                                                      Nyce JW;
%$GGGGGGGGGGGGGGGGGGGG
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Sequence 14968 BP; 5108 A; 2436 C; 2758 G; 4666 T; 0 other;

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0
                                                     241 CCCAGTIGCAAAGIAACAGCAAIGAAGIGCTITCICITIGGAGITACAAGITAITICACIT 300
                                                                                 GAGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCCTAGCAACAAC 360
                               Gaps
                              ö
        Score 138; DB 21; Length 14968;
Pred. No. 1.1e-57;
                            Indels
                           Mismatches
28.2%; Scc.
100.0%; Pre
                                                                                                                                 10723 agtttgtcttctaatggg 10740
                                                                                                                        361 AGTTTGTCTTAATGGG 378
                           Conservative
                 Similarity
                        Matches 138;
       Query Match
                  Local
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Human adenosine receptor related polynucleotide 2nd SEQ ID NO:95. AAA35221 standard; DNA; 14968 BP. 28-JUL-2000 (first entry) AAA35221; 31 AAA35221

antiallergic, artiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss. Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory;

Homo sapiens.

WO200009525-A2.

24-FEB-2000.

99WO-US17712 03-AUG-1999;

98US-0095212 03-AUG-1998;

(UYEC-) UNIV EAST CAROLINA.

Nyce JW;

WPI; 2000-205971/18.

New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstriction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or

Disclosure; Page 1260~1264; 1343pp; English.

The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which carrayers nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiliflammatory, antiallergic, cuseful for the treatment of diseases associated with inflammation. Cuseful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating effects afflict the lungs of a subject. They can be used for treating est, including lung disease and diseases whose secondary confinence conditions, pulmonary hypertension, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive asthma, impeded respiration, respiratory distress syndrome, pain, cystic intromary disease (COBD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including the onlinency disease (COBD), and cancers such as leukaemias, lymphomas, breast and prostate cancer. The reduction of the adenosine content of the ONs reduces side effects. The A-containing ONs break down with the bronchoconstriction and inflammation. AAA33313 to AAA3532 represent the invention, which correspond to SEQ ID No:1 to 185, but the sequences are also called SEQ ID No:1 to 185, but the sequences (AAA32331 to AAA3332) to AAA3332 to the previously named sequences. SEQ ID No:1 to 1680 invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID No: sequences invention the sequence listing.

Sequence 14968 BP; 5109 A; 2436 C; 2757 G; 4666 T; 0 other;

241 CCCAGTIGCAAAGIAACAGCAAIGAAGIGCTITCICITGGAGTIACAAGIIATITCACIT 300 Gaps 0; Length 14968; Indels 0 Score 138; DB 21; Pred. No. 1.1e-57; Best Local Similarity 100.0%; Pred. No. 1.1 Matches 138; Conservative 0; Mismatches 28.28; Query Match

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Db 10603 cccagttgcaaagtaacagcaatgaagtgctttctcttggagttacaagttattcactt 10662 301 GAGICCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCCTAGCAAACAAC δ

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Sequence 14968 BP; 5108 A; 2436 C; 2758 G; 4666 T; 0 other;
Human; interleukin 15; IL-15; gene therapy; chromosome 4q31; infection; drug screening; anthropological lineage; paternity testing; HIV; Human Immunodeficiency Virus; forensic application; T-cell leukaemia; ds.
                                                                                                                                                                                                                                                                                                                                                                    /cons_splice= (5'site:NO, 3'site:NO) replace (101, T)
                                                                                                                                                                                                                                                                                                                                (5'site:NO, 3'site:NO)
                                                                                                                                                                                    /cons_splice (5'site:NO, 3'site:NO)
                                                                                                                                                                                                                         (5'site:NO, 3'site:NO)
                                                                                                                                                 'cons_splice= (5'site:NO, 3'site:NO)
                                                                                                                          /*tag= a
/product= "Human IL-15 protein"
1.346
/*tag= b
                                                                                                                  Location/Qualiflers
347..13604
                                                                                                                                                                                                                                                                                                                                                                                    replace (191, C)
                                          AAD14464 standard; DNA; 14968 BP
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10603..10739
/*tag= k
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10740..13492
/*tag= 1
            10723 agtttgtcttctaatggg 10740
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2807..2892
/*tag g
/number= 3
2893..8695
/*tag= h
/number= 4
8696..8740
/*tag= 1
/number= 4
8741..10602
/*tag= j
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1449..2806
/*tag= f
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       361 AGTITGICTICIAATGGG 378
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                                                                15-NOV-2001 (first entry)
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                                                                          Human IL-15 gene allele.
                                                                                                                                                                                 /*tag=
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                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                           variation
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The present sequence is human interleukin-15 (IL-15) gene allele located on chromosome 4q31. The polymorphic variants of IL-15 genes are useful for the expression and function of IL-15 genes are useful for screening for candidate drugs to IL-15 protein for use in useful for screening for candidate drugs to treat diseases related to IL-15 polymorphic sites are useful for studying control of the protein diversity anthropological lineage, the significance of individual at the novel IL-15 polymorphic sites are useful for studying population diversity and hineage of the phenotypic level, paternity testing, control of disease. Identifying associations between IL-15 for energic applications and for identifying association between a genotype corresponse and a trait, is useful for develophing diagnostic tests and therapeutic treatments for infections, human immunodeficiency virus and therapeutic treatments for infections, human immunodeficiency virus and therapeutic treatments for infections, human immunodeficiency virus and therapeutic presponse and a genotype or haplotype or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel polynucleotides comprising one of 11, PSI-PS11, single nucleotide polymorphisms in human interleukin-15 gene, and useful for treating disorders affected by expression of function of interleukin-15 isogene
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                                                                                                                                                                                                         (367, A)
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P-PSDB; AAE08576.
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Stephens JC;

Nandabalan K,

Denton RR,

Ą, Chew

WPI; 2001-522460/57. Anastasio AE,

(GENA-) GENAISSANCE PHARM INC.

08-FEB-2000; 2000US-0181059.

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"This degenerate base represents polymorphic site"
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866
                                                                                                                                                                                                                                                                      drug screening; anthropological lineage; paternity testing; HIV;
Human Immunodeficiency Virus; forensic application; T-cell leukaemia; ds
                                               chromosome 4q31; infection;
                                   241 CCCAGTTGCAAAGTAACAGCAATGAAGTGCTTTCTCTTGGAGTTACAAGTTATTTCACTT 300
                                                                         GAGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCCTAGCAAACAAC 360
                        Gaps
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    Length 14968;
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   ; DB 22;
: 1.1e-57;
      100.0%; Pred. nc.
                                                                                                                                                                                                                                                           Human; interleukin 15; IL-15; gene therapy;
  Score 138;
Pred. No.
                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                        Human interleukin 15 (IL-15) gene.
                                                                                                                                                                                AAD15838 standard; DNA; 14968 BP
                                                                                                                          10723 agtttgtcttctaatggg 10740
 28.28;
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                  Matches 138;
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Query Match
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           Local
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The present sequence is human interleukin-15 (IL-15) gene located on chromosome 4931. The polymorphic variants of IL-15 genes are useful for studying the expression and function of IL-15 and expressing to IL-15 protein for use in useful for screening for candidate drugs to IL-15 protein for use in useful for screening for candidate drugs to individual at the novel IL-15 polymorphic sites are useful for studying condition diversity, anthropological lineage, the significance of diversity and lineage of the phenotypic level, paternity testing, forensity and lineage of the phenotypic level, paternity testing, for response or consideration and a trait such as level of drug response or susceptibility to disease. Identifying an association between a genotype or haplotype and a trait, is useful for developing diagnostic tests and therapeutic treatments for infections, human immunodeficiency virus and trait creatments for infections, human immunodeficiency virus and conspiculation and approtype or haplotype (or haplotype pair) for the IL-15 gene may be the basis for designing a diagnostic method to determine those individuals who will or will not respond to the treatment, or treatment, it is a lower level and thus may require more treatment it is a lower level and thus may require more
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             treatment, 1.e. a greater does of a drug. The genotyping or haplotyping methods are also useful for developing drugs targetting IL-15. The genotyping and haplotyping methods are also useful for developing drugs targetting IL-15. The trials. IL-15 DNA is useful for therapeutic purposes for treating disorders affected by expression of function of novel IL-15 isogene and also in gene therapy. Expression of an IL-15 isogene and by transforming a targetted organ, tissue or cell population of an expression vector that expresses high levels of untranslatable mRNA for
                                                                                                                                                                                            Novel polynucleotides comprising one of 11, PS1-PS11, single nucleotide polymorphisms in human interleukin-15 gene, and useful for treating disorders affected by expression of function of interleukin-15 isogene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCCAGTTGCAAAGTAACAGCAATGAAGTGCTTTCTCTTTGGAGTTACAAGTTATTTCACTT 300
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28.2%; Score 138; DB 22;
100.0%; Pred. No. 1.1e-57;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                       Disclosure; Page 73-78; 78pp; English.
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Matches 138; Conservative
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A simian species of IL-15 (sIL-15) was purified and analysed by SDS-
DAGE. Bioassay of unstained gel slices indicated IL-15 activity was
assoc. with proteins having mol. wts in the range of 15-17 kba. The
assoc. with proteins having mol. wts in the range of 15-17 kba. The
Identity of the II-17 kba was sequenced. The results indicated the
identity of the II-17 kba was sequenced. The results indicated the
identity of the II-17 kba was sequenced. The results indicated the
connected and amature polypeptide Aar83309. Subsequent sequence encoding
the polypeptide Aar83436. Aar83436 comprises a relatively short 48 AA
leader sequence and amature polypeptide Aar83309. The sequence of the
N-terminal 31 AAs of AAR83309 was used to design one primer, a
for the amplification of IL-15-specific DNA sequences. The first
degenerate mixture coding for all possible codon usages - AAT00528.
The AA sequences of the simian mature N-terminus 26-31 were used
to design a second primer, a degenerate mixture coding for a
complement of all possible codon usages of AAS 26-31, omitting
posn. 3 of Val (AAT00529, AAT00530). Polyadenylated RNAs from CV-1/EBNA
cells were used as templates. A 92 bp DNA fragment was used as a
hybridisn. probe to screen a portion of a plasmid library contg.
CDNA inserts prepd from CV-1/EBNA polyadenylated RNA. This
cented in the isolation of clone C85.sIL-15 that has an ORF
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              SS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Isolated DNA encoding polypeptide with mammalian IL-15 activity - stimulates proliferation and differentiation of T cells, used for treating carcinoma(s), melanomas, etc. and viral infections
             Interleukin-15; epithelium-derived T-cell factor; T lymphocyte;
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                                                                                                                                                                                                                                                                                                                                                                                                          Eisenman JR, Fung V, Grabstein KH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 21.9%; Score 107; DB 16; Best Local Similarity 99.4%; Pred. No. 1.7e-42; Matches 157; Conservative 0; Mismatches 1;
                                                                                  Location/Qualifiers
1..489
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/note=_"claimed"
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/note- "claimed"
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                                                  Cebus apella
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cDNA generated from PMA-stimulated CV-1/EBNA cells was amplified by PCR using primers based on the N-terminal sequence of simian interleukin-15 (sIL-15). A probe based on an isolated clone was ut coscreen a plasmid library containing cDNA inserts prepared from CV-1/EBNA poly-A RNA. Clone C85.sIL-15 was isolated that has the ORF given in AAQ84583.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New purified interleukin-15 - which induces \tau cell proliferation and differentiation, used for the treatment of tumours and viral
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                                                                                                                                                              Interleukin-15; IL-15; sIL-15; T-cell growth factor; African green monkey; CV-1; antitumor; virucide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 489 BP; 162 A; 81 C; 92 G; 154 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Fung V, Grabstein KH;
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Pred. No. 1.7e-42;
           CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
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/product= mature IL-15
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                                                                                                                                                                                                                     Location/Qualifiers
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/product= IL-15
                                                                            BP.
                                                                                                                                           Simian IL-15 clone C85.sIL-15.
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21.9%;
Best Local Similarity 99.4%;
Matches 157; Conservative
                                                                            AAQ84583 standard; cDNA; 489
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                                                                                                                       (first entry)
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145..486
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                                                                                                                                                                                               Cercopithecus aethiops.
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                                                                                                                                                                                                                                                                                                                                                                                                                  (IMMV ) IMMUNEX CORP.
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                                                                                                                       04-SEP-1995
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                                                                                                 AAQ84583;
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   187
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67 agtcattttctaactgaagctggcattcatgtcttcattttgggctgtttcagtgcaggg 126 CTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGAT 186

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BP.

AAT42242 standard; DNA; 489

AAT42242

(first entry)

05-FEB-1997

AAT42242;

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New epithelium derived T cell factor - induces proliferation of T and B cells, stimulates destruction of tumour and virus-infected cells and protects against toxicity, partic. for treating intestinal disease and HIV infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human ETF (epithelium derived T cell factor) cDNA was isolated by screening a IMTLH cell cDNA library with a simian ETF probe. The IMTLH cell line was derived from a stable transformation of a human bone marrow stromal cell culture with pSV3Neo. Mature hETF induces proliferation and/or differentiation of precursor or mature T cells and is useful for promoting long-term in vitro culture of T-lymphocytes and T-cell lines. It is used for treating gastrointestinal diseases including peptic ulcer, colltis and
                                                                                                                                                                                                     hETF; human IMTLH bone marrow stromal cell line; T-cell; B-cell; lymphocyte; proliferation; differentiation; gastrointestinal; HIV infection; human immunodeficiency virus; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 489 BP; 162 A; 81 C; 92 G; 154 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Grabstein KH;
187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
                                                                                                                                                                              Human epithelium derived T cell factor cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           malignancy and for treating HIV infection.
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                                                                                                                                                                                                                                                                                        Socation/Qualifiers
                                                                               AAT49456
ID AAT49456 standard; cDNA; 489 BP.
                                                                                                                                                                                                                                                                                                                                            /*tag= b
/product= hETF
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P-PSDB; AAW09100 AND AAW09101.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   93US-0393305.
93US-0031399.
94US-0233606.
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145..486
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                                                                                                                                                                                                                                                                                                                                                                                                                                          08-MAR-1993;
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22-APR-1994;
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                                                                                                                                                                                                                                                                                                                               mat_peptide
                                                                                                                        AAT49456;
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This is the nucleotide sequence encoding a simian epithelium-derived
T-cell factor (ETF). The protein was purified from African green monkey
CV-1 kidney cells in culture by conventional chromatography: hydrophobic,
CV-1 kidney cells in culture by conventional chromatography: hydrophobic,
anion exchange and reverse phase HPLC, followed by separation by
SDS-PAGE. The proteins from the SDS-PAGE were transferred to a PUPF
nembrane and the band corresp. to ETF was cut out for peptide sequencing.
Primers were synthesised based on this sequence and used to amplify a
Proliferate by phorbol 12-myristate 13-acctate. The 92 bp fragment was
proliferate by phorbol 12-myristate 13-acctate. The 92 bp fragment was
this sequence. ETF is a protein of 15-17 kD which is expressed by
epithelial cells and stimulates proliferation and/or differentiation of
promoting long term in vivo culture of T-lymphocytes and T-cell lines.
                                                                                                        Epithelium-derived T-cell factor; simian; human; culture; proliferation; epithelial cell; differentiation; T-lymphocyte; African green monkey; primer; PCR; polymerase chain reaction; amplification; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New isolated simian and human epithelium-derived T-cell factors which stimulate the proliferation and/or differentiation of T-lymphocytes and T-cell lines
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rauch
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Grabstein K,
                                                                            Simian epithelium-derived T cell factor gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 21; Column 19-20; 22pp; English.
                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fung V,
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145..486
/*tag= b
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             Anderson D,
                                                                                                                                                                                                                                                                                                      US5552303-A.
                                                                                                                                                                                                                         sig_peptide
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29

AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126

Query Match
21.9%; Score 107; DB 17; Length 489;
Best Local Similarity 99.4%; Pred. No. 1.7e-42;
Matches 157; Conservative 0; Mismatches 1; Indels (

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Epithelium derived T-cell factor; ETF; human; gastrointestinal disease; B-cell stimulation; epithelium; vill1; CD4+; CD8+; T-cell stimulation; treatment; prevention; ss.
/*tag= c
/product= ETF
/note= "Epithelium-derived T-cell factor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fung V, Grabstein KH;
                                      Human epithelium derived T-cell factor DNA
                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                              BP.
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94US-0233606.
                                                                                                                              AAV02874 standard; DNA; 489
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/product= 1
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Rauch C;
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22-APR-1994;
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                                                                                                                                                                                                                                                                                 Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                        sig_peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 127 CTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAAATTGAAGAT 186
                                                                                                       Gaps
                                          AGTCATITICIAACIGAAGCIGGCATICAIGICITCATITIGGGCIGITICAGIGCAGGG 126
                                                         CTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGAT 186
                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Antagonists of interleukin-15 - are used to treat patients having symptoms of graft-versus-host disease and for prolonging allo:graft
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A cDNA clone (AAT36634) codes for simian interleukin-15 (IL-15) (AAR98526), a T-cell growth factor. Muteins of simian IL-15 or human IL-15 (see also AAR98527) are useful as antagonists of IL-15 and can be preped. by PCR-mediated mutagenesis of the encoding sequences. Preferred muteins have amino acid substitutions at Asp56 and/or Gln156 of the IL-15 protein that prevent signal transduction. They are useful for treating graft-versus-host disease and for prolonging allograft survival.
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                                                                                                                                                                                                                                                                                                                                Interleukin-15; antagonist; mutein; graft versus host disease;
allograft; T-cell growth factor; ss.
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                  Indels
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99.4%; Pred. No. 1.7e-42;
tive 0; Mismatches 1;
                                                                                                                                             187 CITATICAAICIAIGCAIAIIGAIGCIACIIIAIAIAC 224
                                                                                                                                                        ed. No. 1.7e-42;
Mismatches 1
       Pred. No.
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                                                                                                                                                                                                                                 AAT36634 standard; cDNA; 489
     99.48;
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                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                           Simian interleukin-15 cDNA
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                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Grabstein.KH, Paxton
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Matches 157; Conserv
                                                                                                                                                                                                                                                                                                                                                                       Unspecified simian.
     Best Local Similarity
Matches 157; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              P-PSDB; AAR98526
                                                                                                                                                                                                                                                                                                                                                                                                WO9626274-A1
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                                                                                                                                                                                                                                                                                   17-NOV-1996
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                                                                                                                                                                                                                                                          AAT36634;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                survival
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   67
                                                                                                                                                                      187
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                                                                                              127
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                                                                                                                                                                                                                       AAT36634
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This sequence encodes a human epithelium-derived T-cell factor (ETF) which is used in a method for treating or preventing gastrointestinal disease. These polypeptides have particular applitation in the treatment of gastrointestinal disorders associated with disruption of the gastrointestinal epithelium or villi such as chemotherapy- and radiation-therapy induced entertits (gut toxicity) mucositis, peptic ulcer disease, gastroenteritis and collitis, villus atrophic disorders, malignancy and inflammatory bowel disease. ETF polypeptides may also be useful in the treatment of human immunodeficiency virus (HIV) and HIV associated disease due to their abillity to stimulate CDA+ and CDB+ cells. Biologically active ETF may be used to treat a variety of other diseases or conditions where T-cell or B cell stimulation is desired.
Treatment or prevention of gastrointestinal diseases – by administering epithelium-derived T-cell factor polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 489 BP; 162 A; 81 C; 92 G; 154 T; 0 other;
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The invention relates to an isolated antibody that binds specifically to a simian or human epithelium-derived T-cell factor (ETF) polypeptide. The antibodies are used, optionally when immobilized or labeled, to detect and quantify ETF in standard immunoassays. They may also be used as diagnostic and therapeutic agents, e.g. when conjugated to toxins (or their precursors) or radionaclides. ETF induces proliferation and/or differentiation of T cells (or their precursors), e.g. for use in establishing long term in vitro cultures; and is also used to treat gastrointestinal disease (e.g. entertitis or mucositis induced by chemotherapy or radiation, peptide ulcer, gastroenteritis, colitis, chemotherapy or radiation, peptide ulcer, gastroenteritis, colitis, chuman immune deficiency virus infection or associated disease, or generally in any situation requiring stimulation of T or B cell corressed anti-infectious disease immunity, induction of T-cell lytic
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                                                                                                                                                                                                                                                                                                                                                                                          Epithelium-derived T-cell factor; ETF; immunoassay; enteritis; ulcer; T cell proliferation; gastrointestinal disease; mucositis; colitis; gastroenteritis; villus atrophy; malignancy; inflammatory bowel disease; human immune deficiency virus; tumour; human; ss.
                                                                       AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
                                    Gaps
                                  ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antibodies specific for epithelium-derived T-cell growth factor
      Length 489;
                                                                                                                                                                                                                                                                                                                                                             Human epithelium-derived T-cell factor (ETF) encoding DNA.
                                  Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Grabstein KH;
    Score 107; DB 19;
Pred. No. 1.7e-42;
                                                                                                                                                                                         187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC
                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; Columns 37-40; 34pp; English.
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                                                                                                                                                                                                                                                                              BP
 21.9%;
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93US-0031399.
94US-0233606.
96US-0725969.
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                                                                                                                                                                                                                                                                                                                                     (first entry)
                            Conservative
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                Similarity
Query Match
Best Local Simil
Matches 157; (
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22-APR-1994;
04-OCT-1996;
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Rauch C;
                                                                                                                                                                                                                                                                                                                                   10-JUN-1999
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   destruction of tumour or virus-infected cells. The ssents a DNA encoding a human ETF precursor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Use of antagonists of interleukin-15 for treating an inflammatory bowel disease, particularly celiac disease
                                                                                                                                                                                                                                      67 AGTCATTITCTAACTGAAGCTGGCATICATGICTITCATTITGGGCTGITICAGTGCAGGG 126
                                                                                                                                                                            127 CTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAAATTGAAGAT 186
                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antagonist; irritable bowel disease; IBD;
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                                                                                                         Length 489;
                                                                                                                                       Indels
                                                           92 G; 154 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Simian interleukin-15 (IL-15) nucleotide sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (KENN-) KENNEDY INST RHEUMATOLOGY MATHILDA & TER.
                                                                                                      Score 107; DB 20;
Pred. No. 1.7e-42;
0; Mismatches 1.
                                                                                                                                                                                                                                                                                  CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
                                                                                                                                                                                                                                                                                                 Disclosure; Page 70; 70pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Quaratino S, Maiuri L;
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                                                         Sequence 489 BP; 162 A; 81 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          treatment; ss.
                                                                                                                                                                                                                                                                                                                                                                                      AAZ90031 standard; cDNA; 489
activity or increased destru
present sequence represents
                                                                                                     Query Match 21.9%;
Best Local Similarity 99.4%;
Matches 157; Conservative
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                             polypeptide sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          celiac disease;
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SSSS 8
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Sequence 489 BP; 162 A; 81 C; 92 G; 154 T; 0 other;

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stimulates precursor or mature CD4+ and CD8+ T-lymphocytes to proliferate and differentiate. It also promotes proliferation of the gastrointestinal epithelium. The protein can be used to promote long-term in vitro culture of T-lymphocytes and T-cell lines. ETF can be used for treating HIV infection, HIV-associated diseases, and other diseases or conditions where stimulation of T-cell proliferation would be desirable e.g., it could be used to augment the destruction of tumour cells or virally. Infected cells. ETF may also be used to treat or prevent gastrointestinal disease, including chemotherapy and radiotherapy associated enteritis, disease, including chemotherapy and radiotherapy associated enteritis, collitis, inflammatory bowel disease and villus atrophic disorders. Chemotherapy and radiotherapy associated enteritis (gut toxicity) results in bleeding and sepsis due to gastrointestinal flora checity results in bleeding and sepsis due to gastrointestinal flora diministered to a cancer patient. ETF may therefore be used to increase the tolearted doses radiotherapy and chemotherapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Epithelium-derived T-cell factor; ETF; simian; human; enteritis;
gastrointestinal disease; mucositis; peptic ulcer; cytostatic;
villus atrophic disorder; inflammatory bowel disease; antiinflammatory;
anti-HIV; antiviral; T-lymphocyte stimulator; ss.
                                                                                                                                                                                                                                                                                                                 67 AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
                                                                                                                                                                                                                                                                                                                                                                                     CITCCIAAAACAGAAGCCAACIGGGIGAAIGIAAIAAGIGAITIGAAAAAAAAIIGAAGAI 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag= b
145..486 c
//note= "specifically claimed (see AAB62015)"
                                                                                                                                                                                                                                                              Length 489;
                                                                                                                                                                                                                                                                                         1; Indels
                                                                                                                                                                                                                        Sequence 489 BP; 162 A; 81 C; 92 G; 154 T; 0 other;
                                                                                                                                                                                                                                                           Score 107; DB 21;
Pred. No. 1.7e-42;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                            CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
                                                                                                                                                                                                                                                                                                                                                                                                                                            Human ETF (hETF) polypeptide encoding cDNA.
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96US-0725969.
93US-0031399.
94US-0233606.
                                                                                                                                                                                                                                                               Query Match
21.9%;
Best Local Similarity 99.4%;
Matches 157; Conservative
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/*tag=
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04-OCT-1996;
08-MAR-1993;
22-APR-1994;
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                                                                                                                                                                                                                                                                                                                                                                                   proliferation; differentiation; growth factor; T-cell; T-lymphocyte; proliferation; differentiation; growth factor; precursor; mature; CD4+; CD8+; gastrointestinal; epithelium; cell culture; treatment; HIV; gastrointestinal disease; gastroonteritis; colitis; inflammatory bowel disease, villus atrophic disorder; enteritis; chemotherapy; radiotherapy; gut toxicity; cancer; side effect;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This sequence represents human epithelium-derived T-cell factor (ETF) cDNA. ETF is a previously unidentified T-cell growth factor which
                                                                            CTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAATTGAAGAT 186
                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /product- "Human ETF precursor protein (AAY52310)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Stimulation of T-cells in human immunodeficiency virus infected
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                         Length 489
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                                                    Indels
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/*tag- c
/product= "Mature human ETF (AAY52311)"
                                                                                                                                                                                                                                                                                                                                                                Human epithelium-derived T-cell factor (ETF) cDNA.
                         Score 107; DB 21;
Pred. No. 1.7e-42;
                                                                                                                                                                                                      CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
                                       Pred. No. 1.7e; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; Columns 37-40; 33pp; English.
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1..489
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                                                                                                                                                                                                                                                                                   BP.
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96US-0726817.
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94US-0233606
                         21.9%;
99.4%;
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                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tolerated dose; ss.
                                         Best_Local Similarity
Matches 157; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-OCT-1996;
08-MAR-1993;
22-APR-1994;
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                                                                                                                                                                                                                                                                                                                                        09-FEB-2000
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                             Query Match
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                                                                                                                                                                                              The invention relates to simian and human epithelium-derived T-cell factor (ETF) polypeptides. Antibodies that specifically bind to the ETF polypeptides are used for treating or preventing gastrointestinal diseases, such as chemotherapy and radiation therapy-induced enteritis and mucositis, peptic ulcer disease, villus atrophic disorders and inflammatory bowel disease, for increasing tolerated doses for radiation therapy and chemotherapy agents which are limited by gastrointestinal coxity; and for treating HIV and HIV-associated diseases. The coxitity and for treating HIV and HIV-associated diseases. The conditions where it is desired to stimulate proliferation of rasease or conditions where it is desired to stimulate proliferation of immunoglobulin B lymphocytes, or the secretion of immunoglobulin B lymbocytes, or to sugment anti-infectious diseases immunity, to induce CTL, LAK or NK lytic activity, or to augment the destruction of tumour cells or cells infected with virus. The present sequence represents a CDNA encoding the human ETF (hETF) polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ó
                                                                                                     New antibodies that specifically binds epithelium-derived T-cell factor polypeptide useful for e.g. treating or preventing gastrointestinal diseases, HIV and HIV-associated diseases, augmenting destruction of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    67 AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGGTGTTTCAGTGCAGGG 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Interleukin-15; epithelium-derived T-cell factor; T lymphocyte; ss.
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0
                                             Rauch C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 489;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Indels
                                            Fung V,
                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 489 BP; 162 A; 81 C; 92 G; 154 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              21.9%; Score 107; DB 22;
99.4%; Pred. No. 1.7e-42;
tive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.345
/*tag= a
/labal= precursor nts 145-489
/note= "claimed"
                                           Eisenman JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Simian interleukin-15 mature polypeptide.
                                                                                                                                                                      Claim 1; Column39-40; 35pp; English.
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                                     Grabstein KH, Anderson DM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAT00525 standard; cDNA; 345
                                                               WPI; 2001-217801/22.
P-PSDB; AAB62014, AAB62015.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 157; Conservative
            (IMMV ) IMMUNEX CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                 tumour cells
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A simian species of IL-15 (sIL-15) was purified and analysed by SDS-
PAGE. Bioassay of unstained gel slices indicated IL-15 activity was
assoc. with proteins having mol. wits in the range of 15-17 kDa. The
assoc. with proteins having mol. wits in the range of 15-17 kDa. The
cassoc. with proteins having mol. wits in the range of 15-17 kDa. The
identity of the first 33 ABs of ARR83309. Subsequent sequencing of a
cDNA clone obtd. from a simian library provided a sequence encoding
the polypeptide AAR83436 AAR83309. Subsequent encoding
cC con the polypeptide AAR83430 was used to design synthetic PCR primers
CC for the amplification of IL-15-specific DNA sequences. The first
degenerate mixture coding for all possible codon usages - AAT00528.
CC AAS of the N-terminus were used to design one primer, a
degenerate mixture coding for all possible codon usages - AAT00528.
CC The AA sequences of the simian mature N-terminus 26-31 were used
CC codesign a second primer, a degenerate mixture coding for a
complement of all possible codon usages of AAS 26-31, omitting
posn. 3 of val (AAT00529, AAT00530). Polyadenylated RNAs from CV-1/EBNA
CC cells were used as templates. A 92 bp DNA fragment was used as a
hybriddisn. probe to screen a portion of a plasmid library contg.
CC resulted in the isolation of clone C85.sIL-15 that has an ORF
CC given in AAT00524. AAR83309 is the active polypeptide.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               145 AACTGGGTGAATGTAATAAGTGATTTGAAAAATTGAAGATCTTATTCAATCTATGCAT 204
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Isolated DNA encoding polypeptide with mammalian IL-15 activity stimulates proliferation and differentiation of T cells, used for treating carcinoma(s), melanomas, etc. and viral infections
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 345 BP; 124 A; 50 C; 64 G; 107 T; 0 other;
                                                                                                                                                                                 Grabstein KH;
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2.8e-29;
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ive 0; Mismatches
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                                                                                                                                                                                 Fung V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 2; Page 26; 48pp; English.
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ID AAF57025 standard; cDNA; 345
   94WO-US03793.
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                                                          94WO-US03793
                                                                                                                                                                        Anderson DM, Eisenman JR,
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Matches 80; Conservative
                                                                                                                 (IMMV ) IMMUNEX CORP.
                                                                                                                                                                                                                                                          WPI; 1995-373556/48.
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06-APR-1994;
                                                          06-APR-1994;
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Human breast cancer expressed polynucleotide 18407.
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2000US-0189167
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                                                                                                                                                                                                                                                              WPI; 2001-451856/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 29; Conserv
                                                                                                                                                                                                                                          Xu Y,
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                                                                 WO200151628-A2
                                                                                                                                         14-MAR-2000;
24-MAR-2000;
29-MAR-2000;
15-MAY-2000;
09-JUN-2000;
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                                             Homo sapiens
                                                                                                                                                                                                 25-JUL-2000;
                                                                                       19-JUL-2001
                                                                                                                                                                                                                                          Lillie J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAL19115;
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                                                                                                                                                                                                                                                                                                                                                              The invention relates to simian and human epithelium-derived T-cell factor (ETF) polypeptides. Antibodies that specifically bind to the ETF polypeptides are used for treating or preventing gastrointestinal diseases, such as chemotherapy and radiation therapy-induced enterties and mucositis, peptic ulcer disease, villus atrophic disorders and inflammatory bowel disease; for increasing tolerated doses for radiation therapy and chemotherapy agents which are limited by gastrointestinal toxicity; and for treating HIV and HIV-associated diseases. The antibodies are further used to treat a variety of other diseases or conditions where it is desired to stimulate proliferation of T-lymphocytes and B lymphocytes, or the secretion of immunoglobulin B imphocytes, to augment anti-infectious disease immunity, to induce CTL, in a NK lytic activity, or to augment the destruction of tumour cells or cells infected with virus. The present sequence represents a cDNA cenceding the human ETF (HETF) mature polypeptide.
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                                                                                                                                                                                                                                                                                      New antibodies that specifically binds epithelium-derived T-cell factor polypeptide useful for e.g. treating or preventing gastrointestinal diseases, HIV and HIV-associated diseases, augmenting destruction of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    145 AACTGGGTGAATGTAATAAGTGATTTGAAAAATTGAAGATCTTATTCAATCTATGCAT 204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rauch C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 345;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 80; DB 22; Length 3%.; Pred. No. 2.8e-29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 345 BP; 124 A; 50 C; 64 G; 107 T; 0 other;
                                                                                                                                                                                                                                    Grabstein KH, Anderson DM, Eisenman JR, Fung V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16.4%; Scor.
100.0%; Pred. No. ...
0; Mismatches
                                                                     "mature hETF"
                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                               Oisclosure; Fig 2; 35pp; English.
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                                                                                                                                                        95US-0393305.
96US-0725969.
93US-0031399.
94US-0233606.
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                                                                                                                                                                                                                (IMMV ) IMMUNEX CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                         WPI; 2001-217801/22
                                                                                                                                                                                                                                                                     P-PSDB; AAB62015
                                                                                                                                                                                                                                                                                                                          tumour cells
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                   Homo saptens
                                                                                                                                                                                          22-APR-1994;
                                                                                                                                      39-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80;
                                                                                           US6184359-B1
                                                                                                                                                           22-FEB-1995
                                                                                                                                                                     04-OCT-1996
08-MAR-1993
                                                                                                                 06-FEB-2001
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Best Local S
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AAL25950/c
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The invention relates to human breast cancer expressed polynucleotides (AAL07544-AAL26789) and methods of assessing whether a patient is affilicted with breast cancer by examining the correlation between the expression of certain markers and the cancerous state of breast cells. The polynucleotides and encoded polypeptides are potential markers for detecting, diagnosing, monitoring, characterising treating and potentially preventing breast cancer. The polynucleotides and encoded polypeptides are also useful for isolating compounds with cytostatic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New peptide useful as a marker for the diagnosis of breast cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 384 BP; 126 A; 63 C; 67 G; 127 T; 1 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; breast cancer; cell marker; cytostatic; ss.
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0.00025;
hes 0;
Human; breast cancer; cell marker; cytostatic; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5.9%; Score 29; DB 100.0%; Pred. No. 0.(
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Wang Y, Steinmann K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   461 TIGICCAAAIGIICAICAACACITCIIGA 489
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; Page 3400; 3695pp; English.
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                                                                                                                                                                                                                                                                                                                                                                        2000US-0192099.
2000US-0193480.
2000US-0205230.
2000US-0211315.
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The invention relates to human breast cancer expressed polynucleotides (AALO/544-AAL26789) and methods of assessing whether a patient is afflicted with breast cancer by examining the correlation between the expression of certain markers and the cancerous state of breast cells. The polynucleotides and encoded polypeptides are potential markers for detecting, diagnosing, monitoring, characterising treating and potentially preventing breast cancer. The polynucleotides and encoded polypeptides are also useful for isolating compounds with cytostatic
                                                                                                                                                              New peptide useful as a marker for the diagnosis of breast cancer
                                                                                                                                                                                                                                                                                                                                                                                   5.9%; Score 29; DB 22; Length 474;
100.0%; Pred. No. 0.00025;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                          Sequence 474 BP; 155 A; 76 C; 87 G; 155 T; 1 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human breast cancer expressed polynucleotide 662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; breast cancer; cell marker; cytostatic;
                                                                                    (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
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                                                                                                                   Steinmann K;
                                                                                                                                                                                                                                                                                                                                                                                                                                    461 TTGTCCAAATGTTCATCAACACTTCTTGA 489
                                                                                                                                                                                                                                                                                                                                                                                                                                                279 TIGICCAAAGGTCATCAACACTTCTTGA 251
                                                                                                                                                                                    Claim 1; Page 2067; 3695pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAL08205 standard; cDNA; 506 BP.
              2000US-0192099.
2000US-0193480.
2000US-0205230.
2000US-0211315.
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2000US-0192099.
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2000US-0211315
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                                                                                                                Wang Y,
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                                                                                                                                                                                                                                                                                                                                                                                Ouery Match 5.9
Best Local Similarity 100.
Matches 29; Conservative
                                                                                                                                        WPI; 2001-451856/48
                                                                                                               Xu Y,
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                                     15-MAY-2000;
09-JUN-2000;
                                                             25-JUL-2000;
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15-MAY-2000;
09-JUN-2000;
                          29-MAR-2000;
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24-MAR-2000;
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                                                                                                               Lillie J,
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WPI; 2001-451856/48.

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IL-15; interleukin 15; human; anti-IL15; anti-inflammatory; hepatotropic; anti-arthritic; neuroprotective; antiprollferative; antiulcer; antisense; gene therapy; macrophage; inflammafory disorder; bowel disease; primer; arthritis; cirrhosis; multiple sclerosis; chronic liver disease; ulcerative collitis; cell proliferative disorder; treatment; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nucleic acids, targeted to interleukin-15 (IL-15). The products of the invention have anti-IL15, anti-inflammatory, hepatotropic, anti-arthritic, neuroprotective, antipoliferative and antiulcer activity and can be used for gene therapy. The antisense oligonucleotides are used to inhibit interleukin-15 (IL-15) expression and production, and prevent the recruitment and activation of macrophages. They are used to treat diseases associated with an increased expression of IL-15. Such diseases include inflammatory disorders, such as inflammatory bowel disease,
                                                                   The invention relates to human breast cancer expressed polynucleotides (AALO7544-AAL26789) and methods of assessing whether a patient is afflicted with breast cancer by examining the correlation between the expression of certain markers and the cancerous state of breast cells. The polynucleotides and encoded polypeptides are potential markers for detecting, diagnosing, monitoring, characterising treating and potentially preventing breast cancer. The polynucleotides and encoded polypeptides are also useful for isolating compounds with cytostatic
                                                                                                                                                                                                                                                                                                                                                                 Gaps
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as
 as a marker for the diagnosis of breast cancer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel antisense oligonuclectides targeted to interleukin-15 used treat inflammatory diseases and cell proliferative diseases such inflammatory bowel disease and chronic liver disease -
                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                         Length 506,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human IL-15 targetted antisense oligonucleotide HCL-105.
                                                                                                                                                                                                                                                              Sequence 506 BP; 155 A; 87 C; 106 G; 155 T; 3 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Veerapanane D, Hamanaka S, Hiroyuki K, Nozawa I;
                                                                                                                                                                                                                                                                                                                        DB 22; L
0.00025;
                                                                                                                                                                                                                                                                                                                      5.9%; Score 29; DB
100.0%; Pred. No. 0.0
ive 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                 315 TIGICAAATGITCATCAACACTTCTTGA 287
                                     Claim 1; Page 198; 3695pp; English.
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 New peptide useful
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Best Local Similarity
Matches 29; Conserv
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This invention describes novel antisense oligonucleotides of 8-40 nucleic acids, targeted to interleukin-15 (IL-15). The products of the nucleic acids, targeted to interleukin-15 (IL-15). The products of the invention have anti-III5, anti-Inflammatory, hepatotropic.

In an oan be used for gene therapy. The antisense oligonucleotides are used to inhibit interleukin-15 (IL-15) expression and production, and prevent the recruitment and activation of macrophages. They are used to treat diseases associated with an increased expression of IL-15. Such diseases include inflammatory disorders, such as inflammatory bowel disease.

Include inflammatory disorders, such as inflammatory bowel disease, archifus, cirrhosis, multiple sclerosis, chronic liver diseases, ulcerative colitis and cell proliferative disorders. The treatment may be in vivo or ex vivo. The antisense oligonucleotides of the invention expecific for interleukin-15 (IL-15), and can be delivered expensed in the antisense ligonucleotides disclosed in the method of the
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arthritis, cirrhosis, multiple sclerosis, chronic liver disease, ulcerative colitis and cell proliferative disorders. The treatment may be in vivo or ex vivo. The antisense oligonucleotides of the invention are specific for interleukin-15 (LL-15), and can be delivered exogenously or can be expressed from DNA or RNA vectors. AAZ88709-Z88723 represent the antisense ligonucleotides disclosed in the method of the
                                                                                                                                                                                                                                                                     Gaps
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0
                                                                                                                                                                                                                         Length 27;
                                                                                                                                                                                                                           5.5%; Score 27; DB 21; Length 27
100.0%; Pred. No. 0.0024;
ive 0; Mismatches 0; Indels
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                                                                                                                                                                Sequence 27 BP; 4 A; 7 C; 7 G; 9 T; 0 other;
                                                                                                                                                                                                                                                                                                           124 GGGCTTCCTAAAACAGAAGCCAACTGG 150
                                                                                                                                                                                                                                                                                                                                27 GGGCTTCCTAAAACAGAAGCCAACTGG 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAZ88711 standard; cDNA; 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-US15499
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                                                                                                                                                                                                                                                                     27; Conservative
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                                                                                                                                                                                                                                                Similarity
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Sequence 30 BP; 8 A; 6 C; 4 G; 12 T; 0 other;

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AR004268 Sequence
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AX30244 Sequence
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179219 Sequence
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179219 Sequence
AX3024715 Sequence
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BD008811 Antagonis
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AR094650 Sequence
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128850 Sequence 4
179220 Sequence 4
003099 Cercopithec
AC068318 Homo sapi
AR070289 Sequence
AR085748 Sequence
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179227 Sequence 13
179227 Sequence 13
158142 Sus scrofa
141433 Bos taurus
AR090315 Sequence
AR090316 Sequence
AR108148 Felis cat
AF149700 Ovis arie
U14332 Mus musculu
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Copyright (c) 1993 - 2000 Compugen Ltd.
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AR125110 Sequence AR024355 Sequence	AR122052 Sequence AR122874 Sequence AR125111 Sequence	AX199645 Sequence Z66598 H.sapiens D	AB044313 Mus muscu L21710 Plasmodium	AF033024 Mus muscu	BC021164 Homo sapi	U60094 Xenopus lae U60093 Xenopus lae	X53426 Nicotiana s	AF019981 Dictyoste	X55367 Human alpha	X76913 E.hirae ntp	AB059398 Bos tauru AB023655 Dictyoste	AE007685 Clostridi	D17462 Enterococcu 269944 S nombe chr	AX323781 Sequence	AC020287 Drosophil	ACU14/80 DIOSOPNII AC107244 Rattus no	AC107509 Rattus no	209/1/ Caenornabdı AF016436 Caenorhab	U70844 Caenorhabdi	ALS1262/ Human DNA AC100510 Mus muscu	AC005491 Homo sapi	ACO36140 Homo sapi	AC011521 Homo sapi	U97193 Caenorhabdi	Ul3645 Caenorhabdi AL591589 Zebrafish	z82268 Caenorhabdi	AC109095 Kattus no AC011519 Homo sapi	U28374 Saccharomyc	AC106668 Rattus no	AC109190 Mus muscu	AC103040 Mus muscu AC102668 Mus muscu	AF013593 Homo sapi	AC100949 Mus muscu AC087193 Homo sapi	AC105005 Homo sapi	ACSOSSAS HUMAN DNA ACSOSTAS HOMO SAPI	AC087475 Homo sapi	ACUS/4/3 HOMO Sapi AL160289 Human DNA	U18922 Saccharomyc	AC106011 Homo sapi	AC044837 Homo sapi	AC090561 Homo sapi	AC022410 Homo sapi AC110592 Homo sapi	AC105016 Homo sapi AL122007 Human DNA	Mus m Homo
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Grabstein, K.H., Pettit, D.K. and Paxton, R.J.
Antagonists of interleukin-15
Patent: US 5795966-A 2 18-AUG-1998;
Location/Qualifiers
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                                   Score 489; DB 6; I
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Sequence 2 from patent US
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Grabstein,K.H., Anderson,D.M., Eisenman,J.R.,
Epithelium-derived T-cell factor antibodies
Patent: US 5892001-A 1 06-APR-1999;
Location/Qualifiers
1. 489
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Pred. No. 2.6e-236;
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Sequence 1 from patent US
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11 Similarity 100.0%;
489; Conservative 0;
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1 (bases 1 to 489)
Grabstein, K.H., Anderson, D.M., Eisenman, J.R., Fung, V. and Method of Lreatment with epithelium derived T-cell factor Patent: US 5985262-A 1 16-NoV-1999;
Location/Qualifiers
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Best Local Similarity 100.0%; Pred. No. 2.6e-236;
Matches 489; Conservative 0; Mismatches 0;
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Sequence 1 from patent US 5985262.
AR085740
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PAT 16-MAY-2001

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GAAAAAAATATTAAAGAATTTTTGCAGAGTTTTGTACATATTGTCCAAATGTTCATCAAC 480
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Grabstein,K.H., Pettit,D.K. and Paxton,R.J.
Antagonists of interleukin-15
Patent: US 6168783-A 2 02-JAN-2001;
Location/Qualifiers
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patent US 6168783
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Sequence 2 from patent 1
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AR122868.1 GI:14107834
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Grabstein, H., Pettit, D.K. and Paxton, R.J.
Antagonists of interleukin-15
Patent: US 6165466-A 2 26-DEC-2000;
                                                                                                                                                                                                                                                                                                              tch 100.0%; Score 489; DB 6; L al Similarity 100.0%; Pred. No. 2.6e-236; 489; Conservative 0; Mismatches 0;
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GDASIHDTVENLIILANNSLSSNGNVTESGCKECEELEEKNIKEFLQSFVHIVQMFIN
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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AX320244.1 GI:17901652

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/db_xref="taxon:9606"

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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
I (bases 1 to 489)

Londel,M., Quaratino,S. and Maiuri,L.
Treatment of celiac disease with interleukin-15 antagonists
Patent: WO 0002582-A 4 20-JAN-2000;
LONDEI MARCO (GB); QUARATINO SONIA (GB); MATHILDA AND TERENCE
KENNEDY I (GB); MAIGHI LUIGI (IT)
                                                                                                                                                                                                                   61 CTAAACAGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGT 120
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1 (bases 1 to 489)
Grabstein, K.H., Pettit, D.K. and Paxton, R.J.
Antagonists of interleukin-15
Patent: US 6177079-A 2 23-JAN-2001;
Location/Qualifiers
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Best Local Similarity 100.0%; Pred. No. 2.6e-236;
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Grabstein, K.H., Anderson, D.M., Else Epithellum-derived T-cell factor Patent: US 5574138-A I 12-NOV-1996;
Location/Qualiflers
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Grabbtein,K., Anderson,D., Elsenman,J., Fung,V. and
DNA encoding epithelium-derived T-cell factor
Patent: US 5552303-A 4 03-SEP-1996;
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(Dases 1 to 489)
Grabstein, K.H., Anderson, D.M., Eisenman, J.R., Fung, V. and Rauch, Method for treating or preventing gastrointestinal disease with Patent: US 5707616-A 1 13-JAN-1998;
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       GCAGGGCTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATT
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                                                            AGTTTGTCTTCTAATGGGAATGTAACAGAATCTGGATGCAAAGAATGTGAGGAACTGGAG
                                                                                          GCAGGGCTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATT
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Best Local Similarity 100.0%; Pred. No. 2.6e-236;
Matches 489; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                            1 (bases 1 to 489)
Grabstein.K.H., Ouinn,L.S. and Troutt,A.B.
Muscle trophic factor
Patent: US 5660824-A 1 26-AUG-1997;
                                                                                                                                                                                                    DNA
                                                                                                                                                                                                Sequence 1 from patent US 5660824.
162692
162692.1 GI:2480400
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                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                       /organism="unknown"
79 c 95 g
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Unclassified.
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Gaps 9 180

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30-NOV-2001
      Craniata; Vertebrata; Euteleostoml;
Catarrhini; Hominidae; Homo.
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Compositions and methods for producing antigen-presenting cells
Patent: WO 0185920-A 1 15-NOV-2001;
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1 (bases 1 to 1202)
1 (bases 1 to 1202)
2 (bases 1 to 1202)
Antisense oligomer
Patent: WO 0028019-A 118-MAY-2000;
MOR RESEARCH APPLIC LID (IL); DOUVDEVANI AMOS (IL); UNIV; GURION (IL); Chamovitz (ID) (IL)
Location/Qualifiers
                                                                                                                                                                                                                               GAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACGGAAAGTGATGTTCAC
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Primates; Catarrhini; Hominidae;
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illarity 100.0%; Pred. No. 2.2e-236;
Conservative 0; Mismatches 0;
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                                                                                                               /organism="Homo sapiens"
/db_xref="taxon:9606"
1219 c 249 g 379
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AX301227
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Eukaryota; Metazoa;
Mammalia; Eutheria;
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 Homo sapiens
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Vecrapaneni, D., Hamanaka, S. and Nozawa, I.
Ribozymes targeted to human IL-15 mRNA
Patent: US 6081172-A 11 11-JUL-2000;
Location/Qualifiers
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                                                 1202 bp
Sequence 11 from patent US 6087172.
AR103280
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Sequence 1 from Patent W00028019.
AX024715 GI:10184794
                                                                                                                                                                                                     /organism="unknown"
219 c 249 g
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Matches 489; Conservative
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Unclassified.
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AR103280
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/product="Interleukin 15"
/protein_id="AaA21551.1"
/protein_id="C1:540090"
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GDASIHDTVENI.IILANNSLSSNGNVTESGCKECEELEEKNIKEFLQSFVHIVQMFIN
                                                                                                                                                                                                                                                                                                                                                             /note="cytokine; T cell growth factor; secreted protein"
       Ahdieh, M., Johnson, L., Alderson, M.R., Watson, J.D., Anderson, D.M
                                Cloning of a T cell growth factor that interacts with the beta chain of the interleukin-2 receptor Science 264 (5161), 965-968 (1994)
                                                                                                                                   Anderson, Immunex Research and
ty St., Seattle, WA 98101, USA
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695. 703
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/note="encodes N-glycosylation site"
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219 c 249 g 379 t
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/tissue_type="bone marrow"
                                                                                  2 (bases 1 to 1202)
Anderson, D.M.
Direct Submission
Submitted (06-SEP-1994) Dirk M. Ande
Development Corp., 51, University St
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                     /evidence=experimental
317. .805
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                      and Giri, J.G.
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Matches 48
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/db_xref="G1:17382319"
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GDASIHDTVENLIILANNSLSSNGNVTESGCKECEELEEKNIKEFLQSFVHIVQMFIN
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1202)
Grabstein, K.K., Eisenman, J., Sheanebeck, K., Rauch, C.,
Srinivasan, S., Fung, V., Beers, C., Richardson, J., Schoenborn, M.A.,
                                                                                                                                                                                                                                                                                                                        121 GCAGGCCTTCCTAAAACAGAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGGGCTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATT 496
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Human interleukin 15 (IL15) mRNA, complete cds.
U14407
                                                                                                                                                                                                                                                    100.0%; Score 489; DB 6; L
100.0%; Pred. No. 2.2e-236;
iive 0; Mismatches 0;
                      1. 1202
/organism="Homo sapiens"
/db_xref="taxon:9606"
317. 805
/note="unnamed protein product"
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 Research Institute (US)
              Location/Qualifiers
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                                                                                              /codon_start=1
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                                                                           241 CCCAGTTGCAAAGTAACAGCAATGAAGTGCTTTCTCTTGGAGTTACAAGTAATTTCACTT
                                GAGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGATCCTAGCAAACAAC
                                          101 GAGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCCTAGCAACAACAAC
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Pred. No. 1.6e-210;
0; Mismatches 1;
                                                                                                                                                                                                                                                                 Unknown.
Unknown.
Unknown.
Unclassified.
1 (bases 1 to 489)
Strom.T.B. and Maslinski,W.
Antagonists of interleukin-15
AL Patent: US 6001973-A 5 14-DEC-1999;
Location/Qualifiers
1.489
1.489
1.489
2.155
                                                                                                                                                                                                        DNA
                                                                                                                                                                                                     489 bp
patent US 6001973.
                                                                                                                           GAAAAAAATATTAAAGAATTTTTG 444
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99.8%;
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Sequence 5 from p
AR094649
AR094649.1 GI:10
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                                                                                                                                                                                                                                                              Unknown.
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/db_xref="G1:17901651"
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/translat_ton="MRISYPHILDATLYTESDVHPSCKYTAMKCFILELQVISLES
GDASIHDTVENLIILANNSLSSNGNVTESGCKECEELEEKNIKEFLDSFVHIVDMFIN
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                                                                                                                                                                                                                                                                                                             Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                    480
                                                                                                                          616
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                       CCCAGTTGCAAAGTAACAGCAATGAAGTGCTTTCTCTTGGAGTTACAAGTTATTCACTT
                                                                                                                 GAAAAAATATTAAAGAATTTTTGCAGAGTTTTGTACATATTGTCCAAATGTTCATCAAC
                                                                                                                                                                                                                                                                                                                                                                Compositions and methods for achieving immune suppression Patent: WO 0187330-A 1 22-NOV-2001.
Beth Israel Deaconess Medical Center, Inc. (US)
Location/Qualifiers
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100.0%; Pred. No. 1.5e-213;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="unnamed protein product"
                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    156
                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/db_xref="taxon:9606"
1. .489
                                                                                                                                                                                                                                     Sequence 1 from Patent WO0187330.
AX320242
AX320242.1 GI:17901650
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Strom, T.B. and Maslinski, W.
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AUTHORS
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300 300 360 360 420 420 480 480

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/organism="Homo sapiens"
/isolate="InDIVIDUAL"
/dscar="taxon:9606"
/sex="male"
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LELQVISLESGDASTHDTVENLIILANNSLSSNGNYTESGCKECEELEEKNIKEFLQS
FVHIVQMFINTS"
46 a 75 c 87 g 145 t
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                                                                                                                                                                                                                                            Euteleostomi;
       CTTTATATATACGGAAAGTGATGTTCACCCCAGTTGCAAAGTAACAGCAATGAAGTGCTTTC 274
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                                                                                                                                                                                                                                                                                                                                               Direct Submission
Submitted (03-OCT-1994) Michel A Sorel, Institut de biologie,
INSERM U 211, 9 Quai de Moncousu, Nantes, 44035, FRANCE
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            35 CCATCCAGTGCTACTTGTGTTTACTTCTAAACAGTCATTTTCTAACTGAAGCTGGCATTC 94
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 111 to 452)
SOREL,M.A. and Jacques,Y.
ILIS; expression in human keratinocytes
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H.sapiens mRNA for interleukin 15 (partial).
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ilarity 99.8%; Pred. No. 2.7e-192;
Conservative 0; Mismatches 1;
                                                                                                                                                                                                interleukin; interleukin-15
                                                                                                                                                                                 Z38000.1 GI:995656
                                                                                                                                                                                                                                                                                                        Unpublished
2 (bases 1 to 453)
SOREL,M.A.
                                                                                                                                                                                                                                                                                                                                                                                                         .453
                                               481 ACTTCTTGA 489
                                                             481 ACTTCTTGA 489
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les 452; Conserv
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Best Local S
Matches 452
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SOURCE
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                                                                                                                                                       DEFINITION
                                                                                                                21
                                                                                                                                                                    ACCESSION
VERSION
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AUTHORS
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REFERENCE
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                                                                                                                                                                                            Strom, T. and Maslinski, W.
Antagonists of interleukin-15
Antagonists of interleukin-15
Antagonists of interleukin-15
Antagonists of interleukin-15
BETH ISRAEL DEACONESS MEDICAL CENTER
ON Unidentified
PN JP 2001502521-A/4
PD 27-FEB-2001
PF 25-APR-1997 US 60/016634
PR 26-APR-1996 US 60/016634
PI TERRY STROM, WLODZIMERZ MASLINSKI
PC GIZN15/24, COYK14/54, A61K38/20, C12N15/62, G01N33/68 CC
Strandedness: Single;
CC Topology: Linear;
FH Key
I -489
FT source
I -48016min in -489
FT source
Corganism='Unidentified'
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89.6%; Score 438; DB 6; I
Best Local Similarity 99.8%; Pred. No. 1.6e-210;
Matches 488; Conservative 0; Mismatches 1;
                                                                                               DNA
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/organism="unidentified"
/db_xref="taxon:32644"
80 c 95 g 155
                                                                                                        Antagonists of interleukin-15. BD008811
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                                                                                                                                 BD008811.1 GI:18637184
JP 2001502521-A/4.
unidentified.
unidentified
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ACTICITGA
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                                                                RESULT 20
BD008811
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ORGANISM
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AUTHORS
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61 CTAAACAGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGT
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                                                                                                                                                                                                                                                                                                                                             Unidentified

PN UP 2001502521-A/5

PN UP 2001502521-A/5

PD 27-FEB-2001

PF 26-APR-1997 JP 1997539046

PR 26-APR-1996 US 60/016634

PT TERRY STROM WLODEIMERE MASLINSKI

PC C12N15/24,COT74/54,A61K38/20,C12N15/62,G01N33/68 CC

Strandedness: Single:

CC Topology: Linear;

FH Key Loganism='Unidentified'.
              PAT
                                                                                                                                                                                                                                                                                                           Length 489;
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              linear
                                                                                                                                                                                                         Location/Qualifiers
1. .489
/organism='Unidentified'
Location/Qualifiers
                                                                                                                                                                                                                                                                                                          Score 393; DB 6; I
Pred. No. 9.5e-188;
0; Mismatches 1;
                                                                                   1 (bases 1 to 489)
Strom, T. and Maslinskl, W.
Antagonists of interleukin-15
BETH ISRAEL DEACONESS MEDICAL CENTER
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/organism="unidentified"
/db_xref="taxon:32644"
80 c 96 g 15:
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                      Antagonists of interleukin-15.1
BD008812
BD008812.1 GI:18637185
JP 200150251-A/5.
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Best Local Similarity
Matches 443; Conserv
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                                                                                              AUTHORS
TITLE
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                                                                   ORGANISM
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                                                    454
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACGGAAAGTGATGTTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTITGTCTTCTAATGGGAATGTAACAGAATCTGGATGCAAAGAATGTGAGGAACTGGAG
                                                   TCTTGGAGTTACAAGTTATTTCACTTGAGTCCGGAGATGCAAGTATTCATGATACAGTAG
                          AAAATCTGATCATCCTAGCAAACAACAGTTTGTCTTCTAATGGGAATGTAACAGAATCTG
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99.8%; Pred. No. 9.5e-188;
iive 0; Mismatches 1;
                                                                                                                                                                                              AR094650 489 bp
Sequence 7 from patent US 6001973.
AR094650
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13; Conservative
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hes 443;
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Best Local S
Matches 443
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JOURNAL
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AR094650
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/Translation="WVLGTIDLCSCFSAGLPKTEANWVNVISDLKKIEDLIOSMHIDA

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ESGCKECEBLEBKNIRAHIVQMFINTS"
                                                                                                                                                                                                                                                                                  1 (bases I to 643)
Meazza,R., Verdiani,S., Biassoni,R., Coppolecchia,M., Gaggero,A., Orengo,A.M., Colombo,M.P., Azzarone,B. and Ferrini,S. Identification of a novel interleukin.15 (IL-15) transcript isoform generated by alternative splicing in human small cell lung cancer
                                                                                                                                         PRI 27-SEP-1996
                                                                                                                                                                                                                                  Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Direct Submission
Submitted (12-DEC-1995) S. Ferrini, Istituto Nazionale Ricerca
Cancro, Pharmacology, Largo R. Benzi 10, Genova, 16132, Italy
Location/Qualifiers
1. .643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             110 GCTGTTTCAGTGCAGGGCTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATT 169
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H.sapiens mRNA for interleukin-15 (cell line NCHH82),
X94223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 643;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               77.7%; Score 380; DB 9; LF
100.0%; Pred. No. 3.4e-181;
1ve 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
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                                                                                                                                                                                                                                                                                                                                                                                     Oncogene 12 (10), 2187-2192 (1996)
96218668
            X94223.1 GI:1495461
interleukin-15.
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Ferrini, S.
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Best Local Si
Matches 380;
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HSIL15MR2
                                                                                                                                                DEFINITION
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VERSION
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TITLE
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                                                                                                                                                                 Meazza, R., Verdiani, S., Biassoni, R., Coppolecchia, M., Gaggero, A., Orengo, A.M., Colombo, M.P., Azzarone, B. and Ferrini, S. Identification of a novel interleukin-15 (IL-15) transcript isoform generated by alternative splicing in human small cell lung cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /product="interleukin-15 (IL-15)"
/product="interleukin-15 (IL-15)"
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/db_xref="sulss-pror:p40933"
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            PRI 27-SEP-1996
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                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

    (bases 1 to 643)

                                                                                                                                                                                                                                                                                                                Direct Submission
Submitted (12-DEC-1995) S. Ferrini, Istituto Nazionale Ricerca
Cancro, Pharmacology, Largo R. Benzi 10, Genova, 16132, Italy
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTGTTTCAGTGCAGGGCTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATT 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GIGATGITCACCCCAGITGCAAAGTAACAGCAATGAAGTGCTITCTCTTGGAGTTACAAG 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTATTTCACTTGAGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCC 349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TAGCAAACAACATTTGTCTTCTAATGGGAATGTAACAGAATCTGGATGCAAAGAATGTG 409
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0
643 bp mRNA linear F
H.sapiens mRNA for interleukin-15 (cell line NCIH69).
X94222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tch 77.7%; Score 380; DB 9; Length 643; al Similarity 100.0%; Pred. No. 3.4e-181; 380; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                1. .643
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/isolate="H69/1"
/db_xref="taxon:9606"
/clone="1"
                                                                                                                                                                                                                                                       Oncogene 12 (10), 2187-2192 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /tissue_type="SCLC"
/clone_lib="H69"
/dev_stage="adult"
223. 630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /cell_line="NCIH69"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /codon_start=1
                                                 X94222.1 GI:1495459
                                                                                                                                                                                                                                                                                2 (bases 1 to 643)
Ferrini, S.
                                                                   interleukin-15
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PAT 18-FEB-2000

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Unknown.
Unclassified.
1 (bases 1 to 345)
Grabstein.K.H., Anderson,D.M., Elsenman,J.R., Fung,V. and Rauch,C.
Method of treatment with epithellum derived T-cell factor
                                                                                                                                                                                                                                           1 (bases 1 to 345)
Grabstein,K.H., Anderson,D.M., Elsenman,J.R., Fung,V. and Rauch,C.
Epithelium-derived T-cell factor antibodies
Patent: US 5892001-A 12 06-APR-1999;
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   381 IGTAACAGAATCTGGATGCAAAGAATGTGAGGAACTGGAGGAAAAAAATATTAAAGAATT
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Sequence 12 from patent US 5985262.
AR085747
AR085747.1 GI:10012513
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Sequence 12 from patent US 5892001.
AR070288
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/procein_id="Caa71044.1"
/procein_id="Caa71044.1"
/db_xref="G1:2143256"
/db_xref="G1:2143256"
/translation="MDFQVQIFSFLLISASVIMSRANWVNVISDLKKIEDLIQSMHID
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/translation="MDFQVQIFSFLLISASVIMSRANWVNVISDLKKIEDLIQSMHID
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                                                                                                                                                                           PRI 30-MAY-1997
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1 (bases 1 to 486)

Meazza,R. and Ferrini,S.

Expression of two IL-15 mRNA isoforms in human tumors does not correlate with secretion: role of different signal peptides
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                                     AGGAACTGGAGGAAAAAATATTAAAGAATTTTTGCAGAGTTTTGTACATATTGTCCAAA 469
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100.0%; Pred. No. 1.7e-165;
ive 0; Mismatches 0;
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/organism="Homo sapiens"
/db_xref="taxon:9606"
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/gene="IL-15"
57. 467
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Ferrin1, S.
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Best Local Similarity 100.
Matches 349; Conservative
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1 (bases 1 to 345)
Grabstein, K.H., Anderson, D.M., Eisenman, J.R., Fung, V. and Rauch, C. Method for treating or preventing gastrointestinal disease with epithelium-derived T-cell factor.
Patent: US 5707616-A 12 13-JAN-1998;
                                                                   145 AACTGGGTGAATGTAATAAGTGATTTGAAAAATTGAAGATCTTATTCAATCTATGCAT 204
                                                                                                                                                                                                                                                                                                                                                                                                                                                    205 ATTGATGCTACTTTATATACGGAAAGTGATGTTCACCCCAGTTGCAAAGTAACAGCAATG
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Pred. No. 1.9e-163;
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100.0%; Pred. No. 1...
... 0; Mismatches
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Sequence 12 from patent US 5707616.
179226
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AR087004
AR087004.1 GI:10013770
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100.0%; Pred. No. 1.9e-163;
tive 0; Mismatches 0;
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Grabstein, K.H., Anderson, D.M., Eisenn
Epithelium-derived T-cell factor
Patent: US 5574138-A 12 12-NOV-1996;
Location/Qualifiers
Patent: US 5985262-A 12 16-NOV-1999;
Location/Qualifiers
1. .345
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PAT 07-SEP-2000

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bp mRNA linear PRI 05-FEB-1999 interleukin-15 precursor, complete
                                                                                                                                                                                                                   /translation="MVLGTIDLCSCFSAGLPKTEANWVNJSDLKKIEDLIQSMHIDA
TLYTESDVHPSCKVTAMKCFLLELQVISLESGDASIHDTVENLIILANNSLSSNGNVT
ESGCKECEELEKKNIKEFLQSFVHIVQMFINTS"
                                                    /Lissue_type="testis"
/clone_lib="lambda ZAP express, Stratagene, catalog number
939201, ref. Jerpseth, J., et al., Strategles 5(1), 1992"
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interleukin-15 precursor; IL-15.
Macaca fascicularis peripheral blood mononuclear cells cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      230 GIGAIGIICACCCCAGIIGCAAAGIAACAGCAAIGAAGIGCIITICICIIGAGIIACAAG
                                                                                                                                         /function="T cell/NK cell/mast cell growth factor"
/note="lymphokine"
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                                                                                                                                                                                                                                                                                                                                                                                                    Length 1248;
                                                                                                                                                                                                                                                                                                                                                                                                    67.3%; Score 329; DB 9; Length 12
99.7%; Pred. No. 1.9e-155;
ive 0; Mismatches 1; Indels
                                                                                                                                                                                   precursor"
                                                                                                                                                                                                                                                                                 /evidence-experimental
                                                                                                                                                                                                                                                                                                                                        /product="interleukin 15"
209 c 223 g 419
                                                                                                                                                                                /product="interleukin 15
/protein_id="AAB97518.1"
/db_xref="GI:2739160"
/db_xref="taxon:9606"
/chromosome="4"
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Macaca fascicularis mRNA
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                                                                                                   /gene="IL-15"
519. .926
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/gene="IL-15"
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                                                                                          1. .1248
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1 (bases 1 to 1248)
Tagaya,Y., Kurya,G., Thies,T.A., Losi,J.M., Azimi,N., Hanover,J.A., Bamford,R.N. and Waldmann,T.A. Generation of secretable and nonsecretable interleukin 15 isoforms through alternate usage of signal peptides
Proc. Natl. Acad. Sci. U.S.A. 94 (26), 14444-14449 (1997)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (bases 1 to 1248)
Tagaya,Y., Kurys,G., Thies,T.A., Losi,J.M., Azimi N., Bamford,R.N.
and Waldmann,T.A.
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Institute, Bldg. 10 /Rm. 4B 47, 9000 Rockville Pike, Bethesda,
20892, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAGCAAACAACAGTTTGTCTTCTAATGGGAATGTAACAGAATCTGGATGCAAAGAATGTG 409
                                                                                                                                                                                                                                          TGAAAAAATTGAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATATACGGAAA 229
                                                                                                                                                                                                                                                                                          TTATTTCACTTGAGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCC 349
                                                                                                                                                                                                                            110 GCTGTTTCAGTGCAGGGCTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATT 169
                                                                                                                                                                                                   Gaps
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0
                                                                                                                                                                           Length 1248;
                                                            expression
                                                                                                                                                                         Score 329; DB 6; I
Pred. No. 1.9e-155;
0; Mismatches 1;
                    Unclassified.

1 (bases 1 to 1248)

Bennett,C. Frank and Cowsert,L.M.

Antisense inhibition of interleukin-15

Patent: US 5985663-A 1 16-NOV-1999;

Location/Qualifiers
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1. .1248
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209 c 223 g
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99.7%;
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          ORGANISM
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/translation="MRISKPHLRSVSIQCYLCLLLNSHFLFEAGIHVFILGCFSAGLP
KTEANWVNVISDLKKIEDLIQSMHIDATLYTESDVHPSCKVTAMKCFLLELQVISHES
GDTDIHDTVENLIILANNILSSNGNITESGCKECEELEEKNIKEFLQSFVHIVQMFIN
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                                                                                                                 University,
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 14968)
Krause, H., Jandrig, B., Wernicke, C., Bulfone-Paus, S., Pohl, T. and
Diamantstein, T.
Comparative sequence analysis of cytokine genes from human and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TICATGICTICATITIGGGCTGTTTCAGTGCAGGGCTTCCTAAAACAGAAGCCAACTGGG 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           32 ITTCCATCCAGGGCTACTTGTGTTTACTTCTAAACAGTCATTTTCTAACTGAAGCTGGCA 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /clone="RRm1 I1-15 clone 3"
/cell_type="peripheral blood mononuclear cells"
/tlssec_type="blood"
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0
                                                         Villinger, F. J.

Villinger, F. J.

Direct Submissor, 1995) Francois J. Villinger, Emory |
Pathology, 1327 Clifton Rd, Atlanta, GA 30322, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 559;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29.0%; Score 142; DB 9; Length 55 99.5%; Pred. No. 8.4e-61; 1. Indels ive 0; Mismatches 1; Indels
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                               J. Immunol. 155 (8), 3946-3954 (1995)
96003435
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                                                                                                                                                                           /organism="Macaca mulatta"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          182
                                                                                                                                                                                                                                                                                                                               /product="interleukin-15"
/protein_id="AAB60398.1"
/db_xref="GI:644804"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ďα
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                                                                                                                                                                                                                                                                                                                /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                       /gene="IL-15"
/replace="c"
119
                                                                                                                                                                                                                                                                 /gene="IL-15"
28. .516
                                                                                                                                                                                                                                                                                                 /gene="IL-15"
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93 c
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X91233
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                  primates
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HSDNAIL15
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GDTDIHDTVENLIILANNILSSNGNITESGCKECEELEEKNIKEFLQSFVHIVQMFIN
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                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae; Cercopithecidae; Macaca. 1 (bases 1 to 492)
Tatsumi, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Macaca mulatta
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Euthería; Primates; Catarrhini; Cercopithecidae;
                                                                                                                      of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          92 ITCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGGCTTCCTAAAACAGAAGCCAACTGGG 151
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cercopithecinae, Macaca.
1 (bases 1 to 559)
Villinger,F., Brar,S.S., Mayne,A., Chikkala,N. and Ansari,A.A.
                                                                                       Jurect Submission
Submitted (20-JAN-1997) Masashi Tatsumi, National Institute (80-JAN-1997) Masashi Tatsumi, National Institute (80-JAN-1997) Masashi Tatsumi, National 1.33-1, Shinjuku-ku, Tokyo 162, Japan (E-mail:tatsu@nih.go.jp, Tel:81-3-5285-11179)
2 (bases 1 to 492)
Tatsumi,M.
Molecular cloning and expression of cynomolgus monkey
                                                                                                                                                                                                                                                                                                      /cell_type="peripheral blood mononuclear cells" 1. .144
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Масаса mulatta interleukin-15 (IL-15) mRNA, complete cds.
U19843
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Pred. No. 8.6e-61;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                             /product="interleukin-15 precursor"
/protein_id="BAA19149.1"
/db_xref="G1:1799530"

    492
    /organism="Macaca fascicularis"
    /db_xref="taxon:9541"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           157
                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           б
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/product="IL-15"
91 c 93 c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 29.0%;
Best Local Similarity 99.5%;
Matches 192; Conservative
   Macaca fascicularis
                                                                                                                                                                                                                       interleukin-15
Unpublished (1997)
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                                                                                                                                                                                                                                                                                                                               sig_peptide
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   ORGANISM
                                                            REFERENCE
AUTHORS
TITLE
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Homo sapiens chromosome 4 clone RP11-286D5, complete sequence.
AC096774 AC025061
AC096774.1 GI:15778749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Direct Submission
Submitted (26-SEP-2001) Genome Sequencing Center, Washington
Notiversity School of Medicine, 4444 Forest Park Parkway, St. Louis,
MO 63108, USA
on Sep 26, 2001 this sequence version replaced 91:7387373.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostoml;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 178438)
Waterston, R. H.
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Web Site: http://genome.wustl.edu/gsc/index.shtml
Contact: submissions@watson.wustl.edu
Contact: project Information
Center project name: H_NH0286D05
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28.2%; Score 138; DB 9; Best Local Similarity 100.0%; Pred. No. 2.9e-59; Matches 138; Conservative 0; Mismatches 0;
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28.2%; Score 138; DB 9;
Best Local Similarity 100.0%; Pred. No. 4.7e-59;
Matches 138; Conservative 0; Mismatches 0;
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57172 a 32631 c 33072 g 55563
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KTEANWYNVISDLKKIEDLIQSMHIDATLYTESDVHPSCKVTAMKCFLLELQVISLES
GDASIHDTVENLIILANNSLSSNGNVTESGCKECEELEEKNIKEFLQSFVHIVQMFIN
                                                                                                                Benjamin
D-12203 Berlin,
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10603. .10739,13493. .14001)
join(347. .357,1351. .1448,2807. .2892,8696. .8740,
10603. .10739,13493. .13604)
/gene="ILIS"</pre>
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/gene="IL15"
Genomic structure and chromosomal localization of the human interleukin 15 gene (IL-15) cytokine 8 (9), 667-674 (1996) 97086948
                                                                                                  Direct Submission
Submitted (09-SEP-1995) H.G. Krause, Univ. Klinik,
Franklin, Inst. f. Immunologie, Hindenburgdamm 27,
                                                                                                                                                                                                                                                                      /clone="11/4"
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1. .247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /product="interleukin-15"
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Location/Qualifiers
1. 14568
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8696. .8740
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248. .357
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/gene="IL15"
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2893. .8695
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/gene="IL15"
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/gene="IL15"
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Krause, H.G.
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10740. .13
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PAT 18-FEB-2000

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1 (bases 1 to 489)
Grabstein,K.H., Anderson,D.M., Eisenman,J.R., Fung,V. and Rauch,C.
Epithelium-derived T-cell factor antibodies
Patent: US 5892001-A 4 06-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       T. (bases 1 to 489)
Grabstein, K. H., Anderson, D. M., Eisenman, J. R., Fung, V. and Rauch, C. Method of treatment with epithelium derived T-cell factor Patent: US 5985262-A 4 16 NOV-1999;
Location/Qualifiers
           67 AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              127 CTTCCTAAAACAGAAGCCAACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGAT 186
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Pred. No. 4.4e-43;
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Pred. No. 4.4e-43;
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Sequence 4 from patent US 5892001.
AR070282 GI:7221170
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AR085741.
AR085741.1 GI:10012507
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81 c 92 g
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Vaccine adjuvant comprising interleukin-15
Patent: US 5747024-A 1 05-MAY-1998;
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Grabstein, K.H., Pettit, D.K. and Paxton, R.J.
Antagonists of interleukin-15
Patent: US 5795966-A 1 18-AUG-1998;
Location/Qualifiers
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Pred. No. 4.4e-43;
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Pred. No. 4.4e-43;
0; Mismatches 1;
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Sequence 1 from patent US 5747024.
AR004267
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Sequence 1 from patent US 5795966.
AR024348 GI:3977642
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157; Conservative
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Londel,M., Quaratino,S. and Maiuri,L.
Londel,M., Quaratino,S. and Maiuri,L.
Treatment of cellad disease with interleukin-15 antagonists
Patent: WO 0002582-A 3 20-JAN-2000;
LONDEI WARCO (GB); GONRATINO SONIA (GB); MATHILDA AND TERENCE
KENNEDY I (GB); MAIURI LUIGI (IT)
Location/Qualifiers
                                                       AGTCATTTTCTAACTGAAGCTGGCATTCATGTCTTCATTTTGGGCTGTTTCAGTGCAGGG 126
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                                 Indels
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Grabstein, H., Pettit,D.K. and Paxton,R.J.
Antagonists of interleukin-15
Patent: US 6177079-A 1 23-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 107; DB 6;
Pred. No. 4.4e-43;
0; Mismatches 1,
                                                                                                                                                            187 CTTATTCAATCTATGCATATTGATGCTACTTTATATAC 224
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Pred. No. 4.4e-43;
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                                 0; Mismatches
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Sequence 1 from patent US 6177079.
AR125104 GI:14111166
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AX006785
AX006785.1 GI:9994821
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81 c 92 g
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21.9%;
Best Local Similarity 99.4%;
Matches 157; Conservative
        21.9%;
         Query Match 21.9
Best Local Similarity 99.4
Matches 157; Conservative
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Unclassified.
1 (bases 1 to 489)
Grabstein.K.H., Pettit.D.K. and Paxton,R.J.
Antagonists of Interleukin-15
Anteri. US 6168783-A 1 02-JAN-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                      Grabstein, K.H., Pettit, D.K. and Paxton, R.J. Antagonists of interleukin-15
Patent: US 6165466-A 1 26-DEC-2000;
Location/Qualifiers
1. 489
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Pred. No. 4.4e-43;
0; Mismatches 1;
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Sequence 1 from patent US 6168783.
AR122867.
AR122867.1 GI:14107833
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Grabstein,K.H., Anderson,D.M., Eisenman,J.R., Fung,V. and Rauch,C.
Epithelium-derived T-cell factor
Patent: US 5574138-A 4 12-NOV-1996;
                                                                                                          Query Match 21.9%;
Best Local Similarity 99.4%;
Matches 157; Conservative (
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Grabstein, K., Anderson, D., Eisenman, J., Fung, V. and Rauch, C.
DNA encoding epithelium-derived T-cell factor
Patent: US 5552303-A 1 03-SEP-1996;
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Pred. No. 4.4e-43;
0; Mismatches 1
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/organism="unidentified"
/db_xref="taxon:32644"
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Best Local Similarity 99.4%;
Matches 157; Conservative (
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Grabstein, K.H., Anderson, D.M., Eisenman, J.R., Fung, V. and Rauch, C. Grabstein, K.H., Anderson, D.M., Eisenman, J.R., Fung, V. and Rauch, C. Grathoff or treathing or preventing gastrointestinal disease with epithelium-derived T-cell factor Patent: US 5707616-A 13-JAN-1998;
Location/Qualifiers
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Pred. No. 4.4e-43;
0; Mismatches 1;
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Sequence 4 from patent US 5707616.
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Location/Qualifiers
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81 c 92 g
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AC068518 1 GI:7684450 HTGS_PHASE1; HTGS_DRAFT.
                                                                        Cercopithecinae; Cercopithecus.

1 (bases 1 to 1275)

Grabstein,K.H., Eisenman,J., Shanebeck,K., Rauch,C., Srinivasan,S., Fung,V., Beers,C., Richardson,J., Schoenborn,M.A., Ahdieh,M., Johnson,L., Alderson,M.R., Watson,J.D., Anderson,D.M. and Giri,J.G. Cloning of a Teall growth factor that interacts with the beta chain of the interleukin-2 receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /translation="MRISKPHLRSISIQCYLCLLLKSHFLTEAGIHVFILGCFSAGLP
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GDTDIHDTVENLIILANNILSSNGNITESGCKECEELEEKNIKEFLQSFVHIVQMFIN
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African green monkey.
GercoptiAnecus aethiops
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
                                                                                                                                                                                                                                                                                      Direct Submission
Submitted (02-NOV-1993) Dirk M. Anderson, Immunex Research and
Development Corp., 51 University St., Seattle, WA 98101, USA
Location/Qualifiers
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/organism="Cercopithecus aethiops" / db_txef="taxon:9534" / cell_line="CVJ/EBNA" / cell_type="epithelial" / tissue_type="kidney" / function="r cell growth factor" / note="secreted protein"
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/protein_id="AAA18416.1"
/db_xref-"GI:493522"
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264 c 278 g 367 t
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                                                                                43012 43111; 940 oil 100 bp 43114; 940 oil 4655 bp in length 57167 57866; gap of 100 bp 57867 73189; contig of 15323 bp in length 73180 73289; gap of 100 bp 73290 98890; contig of 25601 bp in length 73290 98890; contig of 25601 bp in length 98891 125697; contig of 26707 bp in length 125698 125797; gap of 100 bp 125698 125797; gap of 100 bp 125798 14469; contig of 38672 bp in length. 1.164469

//db.zxref="texton:0906"
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         20464 300...
30638 30737: gap ot
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Grabstein, K.H., Anderson, D.M., Elsenman, J.R., Fung, V. and Rauch, C.
Epithelium-derived T-cell factor antibodies
Patent: US 5892001-A 13 06-APR-1999;
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2.1e-29;
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1. .345
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